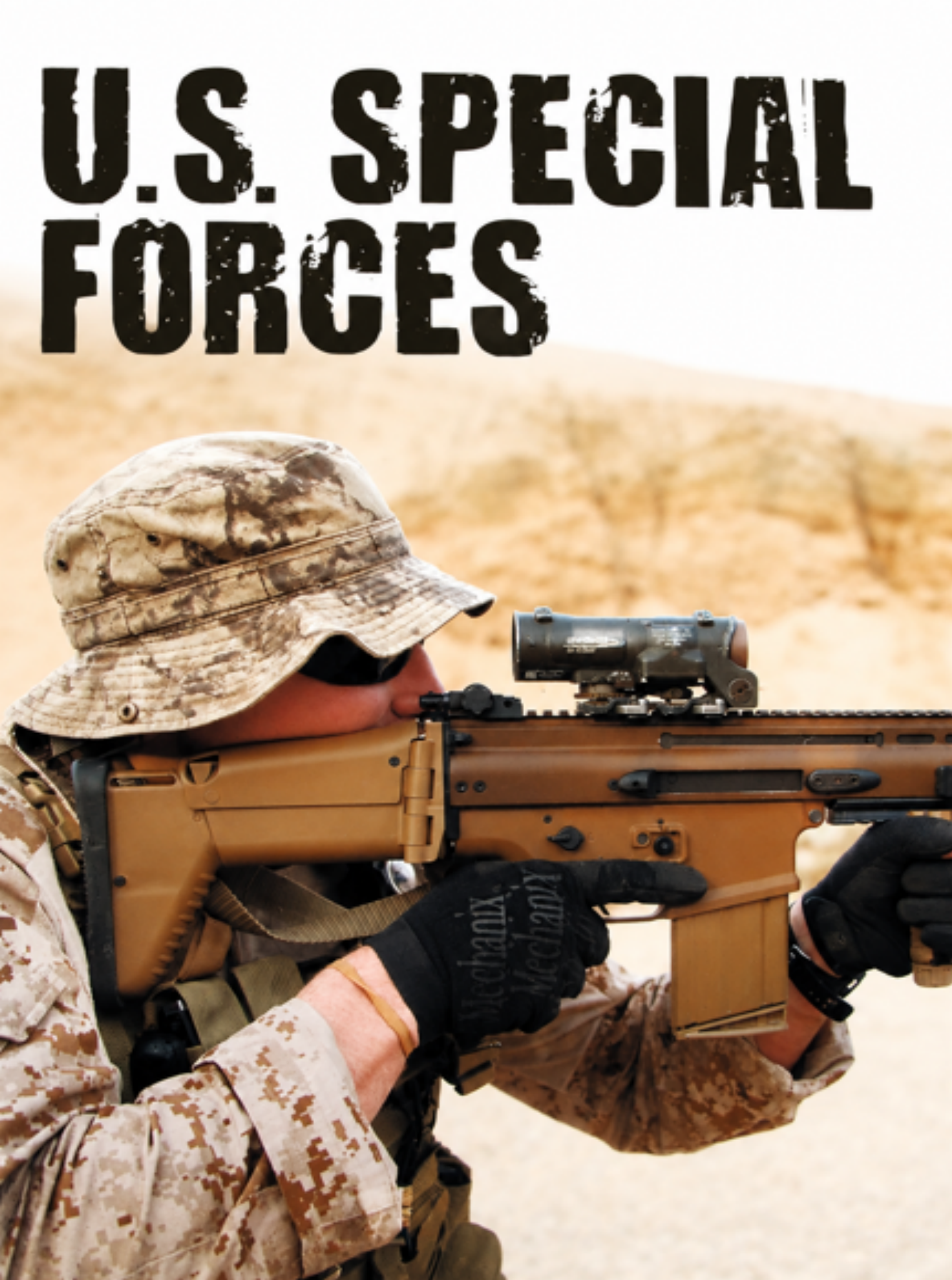
# U.S. SPECIAL FORCES



$29.95

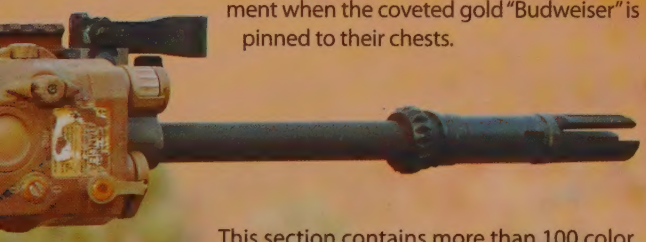
# U.S. SPECIAL FORCES

U.S. special operations units are highly trained military forces trained to perform unconventional and often high-risk missions all over the world. In *U.S. Special Forces*, four special operations units from the Navy, Army, Marine Corps, and Air Force are profiled:

**U.S. NAVY SEALs**

The U.S. Navy SEALs—named for the three environments from which they operate (SEa, Air, Land)—were derived from the Underwater Demolition Teams (UDTs) and other specialized units created during World War II. During the Korean War, UDTs operated as part of the Pacific Fleet and conducted perilous missions like demolitions, reconnaissance, and hydrographic surveys while dodging water-based mines and enduring frigid water temperatures.

Today's Navy SEALs have incredibly advanced mission capabilities compared to their predecessors, but the character and drive it takes to become a SEAL remain the same. To join the ranks of these brave, unconventional warriors, one must go through months of deliberately brutal training designed to break down the weak and leave only the strongest, most capable men. And that is just to qualify for an additional training period, eventually leading to the moment when the coveted gold "Budweiser" is pinned to their chests.



This section contains more than 100 color photos of today's Navy SEALs, including six months of BUD/S, where trainees are pushed to their limits, and real missions where the old SEAL saying—"The only easy day was yesterday"—is proven time and time again.

**DELTA**

America's elite counterterrorist organization, DELTA Force, is a handpicked group of the U.S. Army's finest soldiers and is America's answer to terrorism: The group specializes in hostage rescues and other difficult procedures to protect the lives of Americans throughout the world. Modeled after Britain's legendary Secret Air Service (SAS) and organized by the famed Charlie Beckwith, DELTA is composed of elite noncommissioned officers (NCOs) and officers who train constantly to be the world's best counterterrorist force. Through the U.S. Special Operations Command, DELTA uses some of the

# U.S. SPECIAL FORCES

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**Dedications from previous editions of these titles:**

**U.S. Navy SEALs**
For my good friend Steven Bronson, Chief Petty Officer, United States Navy, Retired, and a hardcore boat guy in good standing.

The author encourages readers to support the SEALs and SWCC boat crews deployed in service to the United States by contributing to the following charities:
• Naval Special Warfare Foundation, P.O. Box 5365, Virginia Beach, VA 23471
• Neil Roberts Memorial Fund, Navy Federal Credit Union, Lynnhaven Branch, 509 Viking Drive, Virginia Beach, VA 23452

**MARSOC**
To the Silent Warriors . . . Semper Fi!

**U.S. Air Force Special Ops**
To the Air Commandos

**About the authors:**

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Hans Halberstadt studied documentary film in college and later took up writing, authoring or co-authoring more than fifty books. Most of his books have been on military subjects, especially U.S. special operations forces, armor, and artillery. He has also written extensively about farming and railroads. Halberstadt served in the U.S. Army as a helicopter door gunner in Vietnam. He and his wife, April, live in San Jose, California.

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**MARSOC and U.S. Air Force Special Ops**
Fred J. Pushies has spent two decades in the company of each of the units assigned to United States Special Operations Command (SOCOM). He has skimmed across the waves with the SEALs in an eighty-two-foot-long Mark V Special Operations craft, flown at treetop level with the 160th Special Operations Aviation Regiment, and crunched through the brush with Force Recon Marines. Fred lives in Westland, Michigan.

*On the frontispiece:* This squad is conducting GOPLATS (gas and oil platforms) take-down drills. GOPLATS in the Persian Gulf are sometimes heavily fortified as well as being inherently dangerous places, loaded with explosive gasses and liquids. They are noisy and have oil-coated decks that make footing uncertain. Real-world GOPLATS take-downs are conducted at night.

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# U.S. NAVY SEALs

# Foreword

The SEALs, because of their unique skills, are highly relevant in the war on terrorism. During the first Gulf War, the SEALs really just supported the U.S. Army and Marines. It was a very cautious approach; they did a lot of good work, but in a limited way. The leaders only took on missions that they thought the SEALs could complete successfully and without casualties, partly due to the traditional discomfort conventional commanders have when unconventional forces are assigned to their control. As one of these commanders said of the SEALs during that first Gulf War, "If the SEALs can find a way to use their flippers in the desert, we'll find a mission for them."

That attitude has changed, and SEALs have really come into our own, especially in Afghanistan at places like Tora Bora and elsewhere. SEALs' attitudes have had to change too, and they are learning to do the sort of unconventional warfare and foreign internal defense that army special forces have always done. Naval special warfare (NSW) has done foreign internal defense for years, but now they are doing it better by learning host-nation language skills and cultural issues that SEALs have not had to focus on in the past (although several SEAL teams have been requiring some, but not all, members to have language competencies for years). I think language skills ought to be a requirement for every man on a team, and suspect someday it will be.

The SEALs' traditional emphasis on operations "with one foot in the water" has diminished during the War on Terror mainly because they are very effective at special reconnaissance, direct action missions, and developing their own intelligence information and acting on it immediately. These capabilities aren't limited to the beach—they work just as well in the middle of Afghanistan and the Persian Gulf. The teams like to develop their own intel and run their ops based upon fresh information, something the Green Berets have been doing for decades with the help of indigenous personnel, and the SEALs ought to continue doing more of that in the future.

Sometime in the distant future, I think the teams will get back to concentrating on maritime missions where NSW submarines, submersible vehicles, and combat swimmer training make the SEALs unique within American special operations forces. For the time being, though, there is a need for small units that are very good at responding rapidly and effectively against high-value targets . . . with or without one foot in the water.

—Commander Mark Devine
Navy SEAL Reserve, NavySEALs.com

# Acknowledgments

The policy of the U.S. Department of Defense and the U.S. Navy is to release as much information as possible about military institutions and activities while maintaining operational security. That can be a tough compromise sometimes, particularly with communities in special operations. In this case, it means that this book is the product of a close collaboration with the navy, the SEAL community, and individual SEALs. All the photography of active-duty SEALs in this book has been reviewed and approved by both U.S. Naval Special Warfare Command and SEAL Teams Three and Five, who assisted with its production.

Many thanks to the friendly folks at Special Operations Command public affairs at MacDill Air Force Base, Florida, particularly Colonel Jake Dye.

This book wouldn't have been attempted without the reassurance of Rear Admiral Brent Baker, now retired, former Navy

Chief of Information, who responded very graciously to some criticism of mine with an invitation to try working with the Navy again. The result is this book. Sir, I salute you.

Another salute to Lieutenant Commander John Brindley and Journalist First Class Mike Hayden, as hard a pair of public affairs officers as you'll find anywhere, with one of the most difficult missions in the fleet—smack dab in the middle between the media maniacs and the NSW community (whose motto is *No pictures!!! No names!!! No kidding!!!*). To two fine people doing what is usually a thankless job, let me say: Thanks! Well done!

I'd like to personally thank the many folks at BUD/S and SEAL Teams Three and Five who helped so graciously, and against tradition, with this project. I'd like to, but I can't—national security and all. But the Desert Patrol Vehicle guys out at Niland, California, and the squad from Team Five went way out of their way to accommodate a bunch of media weenies and executed their op with a perfect blend of cooperation and consideration.

I *can* thank Rear Admiral Ray Smith—what a guy! He's largely responsible for a new, more open attitude toward public affairs within the NSW community, and it's about time. A salute to you, sir, as well.

Captain Bob Gormly and Commander Gary Stubblefield, both U.S. Navy (ret.), filled in the gaps in my NSW education, shared some wonderful war stories and lots of insights based on long careers in NSW. These are, despite the reputation of the SEALs, gentlemen—the kind of quiet professionals you seldom hear about in this community. It's too bad that more Americans can't know about the things these people and their teams have done for us all.

Thanks also to the current public affairs crew at SPECWARCOM for assistance with the revised edition—Commandar Jeff Bender, Lieutenant Taylor Clark, Lieutenant (jg) Paul Barrie, Trish O'Connor, and to the superb Photographer's Mate Second Class, Eric Logsdon of the U.S. Navy.

# Introduction

Although their numbers are small—there are currently about 2,200 SEALs and about 600 special warfare combatant crewmen (SWCC)—members of the naval special warfare (NSW) community are making a huge impact on enemy forces around the world today. Although most SEAL and SWCC missions never make the news, a few ops have been disclosed.

SEALs conducted many VBSS—visit, board, search, and seizure—missions in the months before the invasion of Iraq, fast-roping from SH-60 helicopters onto the decks of suspect and uncooperative ships. They have had excellent success with oil platform take-downs in the Persian Gulf, and SEALs have conducted hundreds of strategic reconnaissance missions all over Afghanistan and Iraq, slipping into areas where enemy forces are active and then reporting on their activities. Nearly all these missions have been entirely secret except when one goes wrong and SEALs are killed, as happened to Neil Roberts when the CH-47 helicopter he was riding in took heavy fire during an insertion.

SEALs and SWCC are also deployed to South and Central America—at the request of the host nation—to conduct foreign internal defense (FID) in support of counter-drug efforts. Other SEALs and SWCC are just as busy in places like the Philippines, assisting local military units in their efforts to eliminate piracy and prevent terrorist acts by Islamic militants.

This is a busy time for the operators, but it is a busy time for their commanders too, all the way up to the most senior levels of the Department of Defense. There has been a massive shift in the way American forces are organized, trained, equipped, and employed. This change began during the first Gulf War but accelerated afterwards and has had a profound impact on the guys on the SEAL and special boat teams (SBTs). Special operations forces (SOF) has always had an important role, but NSW's ability to respond effectively after 9/11 with the appropriately trained and equipped people for the mission at hand earned the community, and SOF in general, a larger

*Above and opposite page:* By the late 1960s and early 1970s, the basic gear used by a SEAL for covert insertion by water had evolved a long way from the primitive and extremely basic equipment issued to World War II frogmen. This early SEAL displays a combat swimmer's standard issue—wet suit, fins, face mask, compass board, Draeger rebreather, dive knife, signal flare, and the ever-popular Heckler and Koch MP-5 9mm submachinegun with sound suppressor. *Author's collection*

role in America's defense strategy. Under Secretary of Defense Donald Rumsfeld, U.S. Special Operations Command (USSOCOM) has been given unprecedented authority to prosecute the Global War on Terror, including the largest budget increase in its history as well as the ability, if so ordered, to direct operations in any theater and be supported by the regional commander—as opposed to supplying forces to support the theater commander.

In the past, Green Berets, SEALs, Rangers, and the other members of the SOF, were "chopped," or assigned to theater commanders who did not really know what to do with these unconventional "cowboys." That is radically different today.

While SEAL teams used to be assigned a specific part of the world for their operations, today NSW forces are organized into squadrons and deploy wherever they are needed. There are new boats, new weapons, and lots of new communication systems. NSW career officers are being tasked with some of the most important roles in the War on Terror, with SEAL officers assigned to roles where they make policy rather than execute it.

A SEAL, Rear Admiral Albert Calland III, commanded the first forces fighting in Afghanistan, and a Green Beret, Colonel Cleveland, controlled all American forces in Northern Iraq during the invasion of March and April 2003. One result of this is that SOF from all the services are getting more missions than in the past, and more critical missions too. At the time of this writing, Marine Corps Force Recon teams were working with NSW, providing support for SEALs while at the same time conducting their own traditional missions.

As this role shifted in the early 1990s, it became obvious that more SEALs and SWCC were going to be needed. Several new SEAL teams have been created, and recruiting for both SEALs and SBTs have been intensified. The nature of the training has changed as well; basic underwater demolition/SEALS (BUD/S) is just as demanding as ever, and the attrition rate remains huge. But the guys on the SEAL teams and the guys on the boats are now integrated on the same team during their pre-deployment workup in a way that is comparatively new.

That is especially true when NSW squadrons deploy and come under the tactical control of a combined or joint special operations task force. Then a SEAL platoon (or several platoons) is teamed up with a Mk V boat detachment, several special operations craft–riverine (SOC-R) boats and their crews, and their intel teams and other supporting players. They will serve alongside Operational Detachment Alphas, the standard twelve-man Green Beret A-team.

When SEALs and SWCC are working closely with the army's special forces, it is sometimes difficult to tell them apart—they're both operating far inland and both conducting the same sort of missions. Both avoid wearing distinctive insignia or uniforms, but you can still make a good guess. If a guy on the battlefield is wearing a ball cap instead of a Kevlar helmet and is loaded to the gills with weapons, and has longish hair, he's likely to be in one of the SOF commands.

Chapter 1

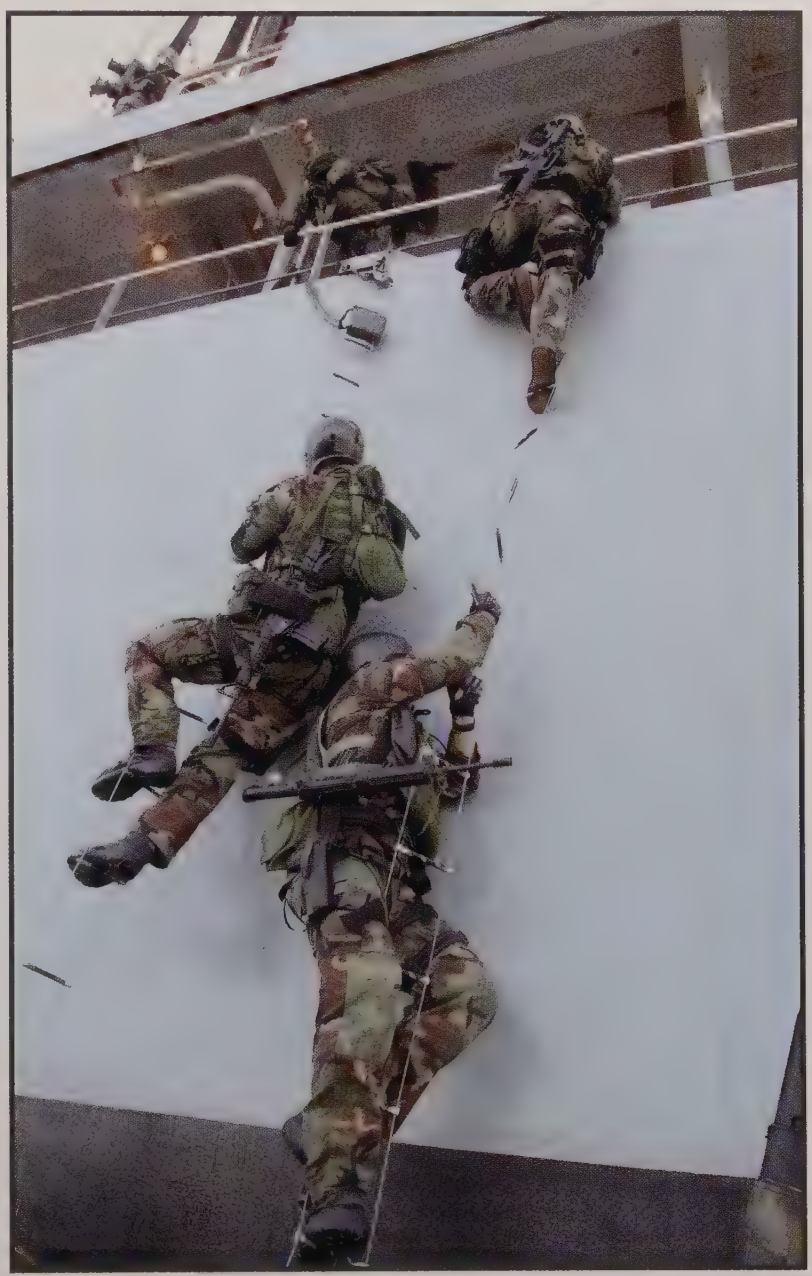
# LET SLIP THE FROGS OF WAR

An essential part of NSW are the unsung heroes, the special boat squadrons (SBSs) and their assortment of heavily armed boats. The boat guys share much of the danger, discomfort, and adrenalin, but without all the public acclaim. SEALs, however, are usually careful to give them credit for their critical role in accomplishing the mission.

Naval special warfare (NSW) has been a very important and much abused subject for more than sixty years. For the U.S. Navy it goes back to the Underwater Demolition Teams of World War II, who cleared beach obstacles and surveyed gradients for amphibious landings in the Pacific and against European shores, many dying in the attempt. It is an extremely dangerous set of missions that cannot be practically executed with other, less demanding means.

The organization and the people of the NSW are actually two communities, one being the men *in* the water, the Sea/Air/Land commandos (SEALs), and the other being the men *on* the water, the special boat squadrons (SBS). Both have a long and distinguished combat record, and both communities have been linked together as NSW for more than forty years. While the SEALs get most of the attention and notoriety, SBS crews have been doing a lot of the shooting and bleeding over the years. While most of the SBS crews are not graduates of the basic underwater demolition/SEALs (BUD/s) training program the boat officers are SEALs, and SBS personnel are held to the same high standard of performance as the more notorious part of the team. This story is about both.

The men in NSW are just one part of a big, broad spectrum of American combat power—in fact, a tiny slice of the pie. There are only about 2,000 of them in the U.S. Navy, far fewer than the U.S. Army's 7,000 or so Green Berets (active and reserve). SEALs, along with the U.S. Army's Ranger regiment and Green Berets, comprise the United States' most elite surface combat operations resources. All are masters of basic infantry tactics; each has its own area of expertise. All train together at some points of their qualification. All, despite their parentage as components of the Navy or Army, are really on-call assets for the highest levels of the national command authority (NCA)—the president, the secretary of defense, and the Joint Chiefs of Staff. When they go to war, their mission will probably start at MacDill Air Force Base, Florida, where U.S. Special Operations Command (SOCOM) is headquartered. It is that kind of organization: powerful, dangerous, expensive, and above all, *special*. There is also something traditionally a bit odd about these special forces soldiers and sailors. They are isolated and aloof from the rest of the military and especially from the public, partly by design and partly by tradition.



The great virtue of NSW is the ability to execute military missions anywhere on the globe, particularly on the world's oceans. Here a SEAL team clambers up the side of a ship, something they can do without warning, even in the middle of the Pacific, even in the middle of the night.

The process of preparing for SEAL missions never ends. When a team returns from one deployment, they begin the process of refreshing their skills for the next. And among the skills that must be the freshest are those involved in close quarters battle, or CQB. Here an instructor reminds SEALs of the fundamentals associated with the M4 carbine. *Eric Logsdon, U.S. Navy SPECWARCOM*

## The Big Picture: SOCOM

SOCOM is one of the best funded, most secure, most competitive parts of the U.S. force structure. All the services, including the Coast Guard, have been caught up, to some extent, in the post–Cold War reorientation away from "high-intensity combat," with its need for nuclear weapons, long-range bombers, numerous tank divisions and aircraft carriers, to "low-intensity combat," where combatants are harder to identify, therefore requiring the work of small teams of extremely adept people like SEALs and Green Berets.

SOCOM is just one of eight unified commands within the U.S. armed forces and has been a major player in the defenses of America since 1987. It integrates assets from all the services into one organization with one commander and with the same basic set of missions for everybody. That doesn't mean that everybody does the same thing; rather it means that the navy, army, and air force pool their talents and resources for planning, training, and executing missions. The navy's contribution to SOCOM is NSW command, comprised of SEAL teams, special boat squadrons, and swimmer delivery vehicle teams.

Special operations forces have traditionally been the "bad boys" of all the services. Many senior officers have, over the years, been candid about their loathing of the "cowboys" within their large, conservative organizations. Special forces training and missions produce a kind of lunatic intensity that is accepted within these groups but that clashes badly with the larger navy or army community within which it is supposed to function. Special operators have a reputation (well earned by an earlier generation) of using their own independent criteria for acceptable behavior. Green Berets used to say, when asked if they were in the army, "No, I'm in special forces." Some still do.

Becoming a SEAL or a Green Beret has never, as a result, been considered the fast track to high rank. It was, and still is, a special place for special men (and, very rarely and not in the SEALs, a few incredible women) who consider these extremely demanding roles a kind of calling. They aren't in the business to

SEALs never operate alone and every man has a buddy to watch his back and to haul his carcass back to the beach if necessary. The buddy team concept begins in BUD/S and lasts as long as a man is on a team. The fundamental building block of SEAL missions is the swim pair.

Above and opposite: The foundation of NSW is based on the combat swimmer skills developed by the UDT frogmen of World War II. They remain important today for covert insertions on targets near the water.

get rich or famous but to be measured by the highest standard of military performance and found acceptable. That is the real lure and the real reward of the special forces.

While the special operators may not always be personally popular within their services, the additional stress and funding for such missions has made for a very competitive budgetary environment. Both the Army and the Marine Corps compete with the Navy for the missions carried out by the SEALs. In fact, you could stand on a beach being infiltrated by combat swimmers and be very hard pressed to know who was about to kill you—U.S. Army Green Berets or Rangers, Marine Corps Force Recon, or U.S. Navy SEALs. All use precisely the same weapons, boats, dive gear, radios, and uniforms—and all train for what sometimes looks like the same exact mission. But it turns out that the missions do have distinctions and the overlap is not as great as it initially appears.

## Joint Special Operations Command

Joint Special Operations Command (JSOC) is a kind of planning and coordination cell, headquartered at Pope Air Force Base, North Carolina, (co-located with Fort Bragg). It was created in 1980 as a joint headquarters designated to study the techniques and requirements of all the Special Operation Forces (SOF) components, including NSW—in other words, to ensure that everybody's playing off the same sheet of music.

NSW Development Group (NSWDG), formerly known as "SEAL Team Six," is one of two units under JSOC—along with Delta Force—that are so secret the Department of Defense does not acknowledge their existence. NSWDG is responsible for counterterrorist operations in maritime environments and is one of only a few U.S. military units authorized to conduct preemptive action against suspected terrorists and terrorist facilities.

## SEAL Specialties

In contrast with air force and army special operators in the ranger regiment and special forces groups, SEALs are generalists, although each will have a specialty—intelligence, submarine operations, weapons, engineering, communications—that he does in support of the organization in the planning process. But once the squad of SEALs goes off to war, he has to be able to do the job of anybody else on the team. "If I'm the platoon commander on a mission and I take a hit," one SEAL officer says, "the assistant platoon commander can take over. It doesn't matter if he was the corpsman or the radioman, he can take over that operation and direct it to completion. I can pick up the radio, treat a wound, use any of the weapons. Green Berets say they can do that too, but I think we build generalists while they build specialists. That's probably because they operate in larger groups. We operate in groups anywhere from four to sixteen men, and any one of our guys can slip into the role of any other guy . . . within limitations."

## SEAL Missions

Just about all the special operations forces have the same basic list of missions. Each of them adapts these missions to the unique talents of the force. For the NSW community the list looks like this:

1. Direct action (DA)—Short-term seize, destroy, damage, or capture operations. Attacks against facilities ashore or afloat; prisoner snatch operations; small offensive combat operations against hostile forces.
2. Special reconnaissance (SR)—Reconnaissance and surveillance operations. Covert beach surveys, listening posts, observation posts.
3. Unconventional warfare (UW)—Training, leading, and equipping partisan and guerrilla forces, behind enemy lines.
4. Foreign internal defense (FID)—Training, advising, and teaching the military, paramilitary, and law enforcement personnel of allied nations. Professional development, normally in a noncombat environment.

5. Counterterrorist operations (CT)—Operations conducted against terrorist units and individuals. May be as direct responses to terrorist operations or as indirect, preventive, deterrence measures.

All these missions have implications for their missionaries. To accomplish missions like these and survive, the people and the organizations they belong to need to be agile (individually and organizationally), trained to a far higher standard than conventional military personnel, and provided with far more resources, man for man, than conventional units. This assignment makes for organizations that are expensive and exclusive.

## The "Wiring Diagram"

Special warfare command (SPECWARCOM) is an interesting community. Although the SEAL teams are its most famous component, they are only one part of the whole business of NSW—a fairly small part, in fact.

A rear admiral commands two major combat resources, NSW Groups One and Two. Each of these groups is organized into:

Three SEAL teams, comprised of eight 16-man platoons, which conduct reconnaissance, DA, UW, FID, and other operations in maritime or riverine environments

One SEAL delivery vehicle (SDV) team which operates and maintains submersible systems that deliver and recover SEALs in hostile areas and conduct reconnaissance and DA missions

NSW units, which are small command and control elements located outside the continental United States, support other NSW forces assigned to theater special operations commands (SOCs) or components of naval task forces.

Group One—assigned SEAL teams One, Three, and Five—operates out of Coronado, California, and generally deploys forces to the Pacific and the Persian Gulf. Group Two—with teams Two, Four, and Eight—is headquartered at Little Creek, Virginia, and is responsible for operations in and around the Atlantic, including Europe and Latin America. These two headquarters are the administrative foundations for special warfare and, despite the sneers from the operators in the field about the "puzzle palace" (as such headquarters are often called) they are essential to the efficient coordination of assets and activities.

Coronado is not only home to NSW and Group One, but also to the notorious NSW Center where SEALs are trained. Basic underwater demolition/SEAL (BUD/S) training is conducted at Coronado, the entry point for all new SEALs and SEAL delivery team members. The center also conducts advanced training and professional development programs for members of the SPECWARCOM community.

Little Creek, besides hosting Group Two, is responsible for the Special Warfare Development Group. This is the SEAL think tank where new weapons, tactics, communication systems, and dive equipment are tested, evaluated, and written into doctrine. Little Creek is also responsible for the development of special operations tactics for air, ground, and maritime forces, in and out of NSW. SPECWARCOM includes detachments in Alaska and Hawaii, plus five special warfare units.

What you don't see advertised are the semi-covert programs called Development Group and Red Cell. Development Group provides support for a variety of classified programs that—sorry—we aren't going to tell you about. Red Cell is an offshoot from the Naval Security Coordination Team and has the interesting mission of assisting navy commands around the world with their security problems. This help is not always welcomed because it is done in a sneaky way when the Red Cell members sneak or break into what are supposed to be secure facilities. They are supposed to act like terrorists or subversives—and that's the way a lot of people outside NSW think of them. Some commanders seem to think Red Cell creates more security problems than it solves. This program was at one time extremely notorious and the subject of a book by one of its former commanders (written while in prison) that scandalized NSW. It appears at this writing that the program will be transferred out of NSW into the more conventional naval investigative service.

## SEAL and Special Boat Squadron Basics

Although we usually refer to this community as SEALs, it is a bigger, more complicated business than the SEALs alone. The other major part of SPECWARCOM is the guys on the surface who go through the same training at BUD/S, go off on the same missions, and bleed at least as much as the members of the SEAL teams—the special boat squadrons (SBS) and the members of the special warfare units. They're all NSW members, although all the attention and glory seems to go to the SEALs alone. But, as the history of NSW in Vietnam and after shows, much of the combat and the killing has been done by the riverine warriors duking it out with the bad guys ashore with .50-caliber machine guns and Mk 19 grenade launchers, all while roaring around in their PBRs (patrol boats, river) in a nonstealthy way.

The idea behind the boat squadrons is to provide the SEAL teams with dedicated, organic mobility, as well as some kinds of

teams with dedicated, organic mobility, as well as some kinds of special patrol and surface strike missions. These squadrons are commanded by SEALs but manned largely by sailors from the surface warfare community, what SEALs often call the "black shoe" navy. Although part of the NSW community, they are not quite SEALs but rather SEAL support units.

The home base for SEAL/SBS operations seems somehow out of place on the luxurious, tropical paradise of Coronado, California, just across the bay from San Diego. While tanned tourists frolic on the beach nearby, SEAL/SBS operations and training are planned and conducted at the Naval SPECWARCOM, a component of U.S. Special Warfare Command. The headquarters is just another rather modern concrete building, complete with the requisite lawn and landscaping, plus plenty of chain-link fence, guards, and razor wire.

The U.S. Navy takes the prize for inventing and actually using the world's biggest and most awkward acronyms, one of which is SPECWARCOM. You might as well get used to words like this because everybody in the SEAL/SBS community uses them all the time; they are unavoidable. SPECWARCOM is the parent headquarters for all navy special operations of which SEALs are only a part.

## SEAL Teams

On paper at least, a full-up SEAL team includes ten platoons of SEALs plus a small support staff from the black shoe navy. This support staff are the yeomen for administrative support, radiomen, ordnance specialists, a navy diver to help with the dive locker—about twenty non-SEAL personnel. There is an additional command element including the commanding officer, executive officer, and operations officer, all of whom are SEAL-qualified.

While in theory there are ten platoons in each team, it doesn't usually work out that neatly. Each team has an intense

*Left and below:* The character required of a navy SEAL is somewhat different than that of other members of special operations forces, partly by selection and partly by design. SEALs have an exceptional kind of self-confidence that is the result of the demands of the BUD/S program, and that self-confidence extends to the team and their very small, very select community.

available to participate in a platoon. But each of the platoons will have sixteen SEALs assigned: two officers and fourteen enlisted members. These are grouped further into two squads of eight, each getting an officer and seven enlisted. The squads themselves are split into fire teams of four men, the fire teams each having two swim pairs.

The squad has traditionally been the organization of choice for SEAL operations and has turned out to be a very efficient group for many missions.

A lot of SEAL equipment is designed around these groups. The Mk V patrol boat is designed to accommodate sixteen SEALs. Fire teams of four fully-combat-loaded SEALs fit very nicely into a combat rubber raiding craft. The patrol craft, Mk I is designed to carry a squad of eight SEALs.

## SEAL Mobile Training Teams

SEALs (and Green Berets) are deployed all over the world, all the time; not just in high-profile places like Afghanistan and Iraq, but also on quiet little assignments that you never read about in the papers—even while dramatic things happen and the proverbial poop hits that fabled propeller. These deploy-

The tail gunner provides rear security for a squad moving across an open beach in daylight. He's carrying an M60E3 medium machine gun, a variant of the weapon that has been in service for more then thirty years and is gradually being replaced by the M48 on the teams.

ments have two functions: one is to put the special forces people out near the scene of a possible crime, before it is committed, ready to respond; the other is to train in environments a lot more realistic than are available in the United States.

One of these quiet deployments ("dets" in the trade jargon) nobody ever hears about—especially with all the higher profile post-9/11 operations that have taken place—is in support of the anti-drug war in Central and South America. Although U.S. law prohibits SEAL/SBSs and other American military personnel from active combat, U.S. policy is to use special operations forces personnel to train the trigger pullers to a high standard. And executing that mission is the team of Naval Special Warfare Unit Eight (NSWU-8) and Special Boat Squadron Twenty-Six (SBS-26), forward based out of Rodman in Panama but with people and boats busy in many Latin American nations.

These organizations, along with SEAL Team Four, are tasked with providing mobile training teams (MTTs) to Bolivia, Argentina, Brazil, Colombia, Equador, and other nations where drugs are manufactured. All these countries have extensive river systems; there are more than 140,000 miles of navigable rivers in South America, with 20,000 in Bolivia alone. These become the highways for transportation of drugs. To control the drug flow requires efficient, effective patrol of the rivers, something the SBS folks do better than anybody.

The MTTs involve quite small numbers of U.S. personnel and equipment to train rather large numbers of host-nation personnel. Sometimes the SEAL/SBS team doesn't even supply the boats. Once on scene the SBS team starts working with the boat operators from the host nation while the SEALs work with the police or military people who will do the patrolling ashore. In Bolivia this force is called the Blue Devils; it has been almost entirely trained by these MTTs. The SBS and SEAL dets have helped the Bolivians develop four bases for counter-drug operations deep in the jungle.

In Colombia the story is a little different. The U.S. Marine Corps runs the show there, where they've had a long and chummy relationship with the Colombian marines. The Colombian det includes one officer and four enlisted SEAL/SBS personnel, all with a special interest in riverine operations and with Spanish language skills. MTTs in Colombia, as elsewhere in the program, last six months.

## Special Warfare Units and Forward Basing

Since there are so few SEALs to go around, and since the "real world" has a way of blowing up in your face unexpectedly, NSW has developed forward bases closer to the potential hot spots of the

world" has a way of blowing up in your face unexpectedly, NSW has developed forward bases closer to the potential hot spots of the world than Coronado or Little Creek. These are the NSW units (NSWUs), each with people, facilities, and equipment intended to speed up the process of planning and launching missions.

There are five NSWUs. When the real world starts acting up these are reorganized as NSW task groups and units and start manning up with extra personnel from in and out of the NSW community. An emergency will probably find assets getting requisitioned from other NSWUs, particularly the exotic, complex swimmer delivery vehicle (SDV), which may be flown in from the United States.

Two SWUs serve the European Command area from bases in Spain and Scotland. The NSWU base in Spain (NSWU-6) uses rigid inflatable boats (RIBs), patrol boats, coastal (PBCs), and Mk V patrol boats. The base in Scotland (NSWU-2) uses RIBs only. The Pacific Command is served by NSWU-1, recently repositioned from the Philippines to Guam; like NSWU-6, it uses RIBs, PCs, and Mk V patrol boats. NSWU-8 serves the extremely busy Southern Command out of Rodman Naval Station in Panama, supporting the busy counternarcotics operations with a mix of riverine and coastal patrol boats and the RIBs. Detachments in Hawaii and Alaska provide SEALs with a broad range of training options.

Besides these forward bases, two large NSW groups on the East and West coasts of the United States provide a continental United States (CONUS) foundation for operations "downrange."

One of the things that has changed tremendously for SEALS and all American tactical operators over the past ten years is the kind of combat equipment or "battle rattle" worn on missions. The SEALs in this 1992 photograph all wear the old standard web gear with suspenders, pistol belt, ammunition pouches, and canteens, that changed very little from the Vietnam era until about 1995. Modern systems are based on a modular vest pattern and often include ballistic armor plates.

For some NSW assets, forward basing is the only practical way to show up on time for the little "come as you are" wars that are the stock in trade of special operations forces. The PCs, for example, are far too big to go anywhere except under their own power. Although they are fast, it's a mighty big world. If they had to self-deploy from the United States, it could take these ships almost three weeks to arrive at some possible operational areas.

## Change of Mission

The commander's intent for American special operations has changed quite a bit since the idea was first used fifty years ago, at the outset of World War II. Back then, the idea was to provide support for partisans and guerrillas in occupied France, Yugoslavia, China, and elsewhere. It involved very little—if any—direct combat. It was a training, leading, and supplying role for forces that tried their best to avoid direct contact with German or Japanese forces while collecting intelligence and sabotaging vehicles, railroads, and bridges, and occasionally assassinating an individual enemy.

Special operations forces today still train for that mission—and SEALs execute something like it every day—in nations all over the world. The trainees aren't guerrillas anymore, but soldiers, sailors, and law enforcement officers from nations such as Colombia, Bolivia, and Kuwait; and the enemy is now quite often the guerrilla-like forces who manufacture and distribute drugs or terrorists in Ireland, the Middle East, or Latin America.

The War on Terror has, more than anything else, inspired much of the mission of today's SEALs and other SOF communities. The tasking for NSW is now, essentially, to be prepared to conduct short-notice small-unit operations at night over the horizon, to infiltrate from sea, air, or land in adverse weather. Instead of training others to fight large, conventional battles, SOF units, including the SEALs, are much more like global SWAT teams that can be sent to fight almost anybody, almost anywhere. Like a good SWAT team, these forces are task-organized and are based on stealth, shock, surprise, and precision. While some SEALs still study foreign languages and are charismatic instructors for people of extremely alien cultures, the heavy emphasis now is on preparing SEALs to be able to slither deep into hostile territory up to easy pistol range of very specific bad guys, put 9mm bullets between their eyes, and get out without being obvious about it. The battlefield can be a hotel, an airliner, a civilian cargo ship, an oil platform, a factory, or an embassy. And the enemy may be one hostile man—or woman—surrounded by innocents.

This is a tall order. In fact, it is sometimes too tall; SEALs aren't, despite what you hear, supermen. They get tapped to do impossible missions sometimes because they are so skilled, so sneaky, so confident . . . and they die in the attempt, sometimes, as in Panama and Grenada, when they're pushed beyond their

Chapter 2

# A SHORT HISTORY LESSON

This motley crew is a squad of warrior SEALs from long ago and far away. Standing are Pierre Birtz, Bill Garnett, Charlie Bump, and Bob Gormly; kneeling are Jess Tollison and Fred McCarty; the photo was taken in 1967. With Gormly (then a lieutenant) as squad leader, these men operated around the town of Binh Thuy, helping establish the reputation of the SEALs as among the most elite American warriors. All made naval special warfare a profession, and all are now retired except for Tollison, who was killed in an accident at the Niland, California, training facility in 1971. Gormly went on to command SEAL Teams Two and Six, UDT-12, and NSW Group Two before retiring in 1992 as a captain. *Bob Gormly collection*

The keel for today's SEALs and special boat squadrons (SBSs) was laid in May 1942 with the formation of the naval combat demolition unit at Fort Pierce, Florida. The men who were selected for the program came from the naval construction battalions and the U.S. Navy/Marine Corps Scout and Raider volunteers. All had extensive swim experience; some were commercial divers; all were in superb physical condition. The training was not too different, fifty years ago, from today—lots of physical training (PT), lots of swimming, lots of demolitions. The stress level was high, by design. Training continued day and night, in the swamps with the alligators, on the beaches, and offshore.

The motivation for the program had come toward the end of the previous year. After less than a year of war, the United States was beginning to strike back at the entrenched Japanese, first at Guadalcanal, then, in November, at Tarawa . . . "terrible Tarawa," as it will always be known to the Marine Corps.

The United States was badly unprepared for war, and even more unprepared for large-scale, long-range amphibious operations. One thing that makes war interesting is the way individuals and nations respond to the surprises and stresses imposed on them by events. In the case of the U.S. Navy and Marine Corps in 1942, this meant not merely the attack of Japanese installations in the Pacific, but the seizure of critical bases.

Many of the basic frogman techniques in use today were invented half a century ago in the pressure cooker of war. That includes the technique for deploying a line of swimmers off an enemy-held beach from a high-speed boat.

Guadalcanal came first, and the invasion phase of the operation, at least, was a cakewalk. The marines were able to step ashore, essentially unopposed, often with dry feet. Getting the force ashore was just the least of the problems at Guadalcanal, most of which came soon thereafter. The navy had been lucky with that phase of the operation. Tarawa was different. D-day for Tarawa was 20 November 1942. Information about the island, its defenses, and its approaches was limited. Hydrographic data was sketchy, tidal data almost nonexistent. The assault force commander took a risk, knowing the stakes, and lost.

The marines were sent in aboard conventional landing craft. Five hundred yards offshore, within the range of Japanese machine guns, the boats ground to a halt against coral reefs. The marines, in the grand tradition, jumped off the boat ramps for the long wade into the beach . . . and died in droves. Many stepped into depressions in the coral reef; heavily loaded, they sank and drowned. The rest had to endure the heavy, interlocking fields of fire from the Japanese defenders. It was a disaster.

Hundreds of marines died before the battle for Tarawa really even began. In a way, their lives were wasted, but in another way, by dying this way, they taught the navy a lesson. The lesson was, and still is, that amphibious assaults are high-risk operations that require careful preparation. And that need for battlefield preparation was the idea for the development of the navy combat demolition unit.

The unit's mission was to scout possible invasion beaches and to clear, with explosives, obstacles that might prevent the invasion force from reaching the beach, as had happened at Tarawa. It was recognized that there were essentially four hazards to the force: enemy action from fortifications ashore, enemy-built obstacles such as concrete blocks placed in the water, natural obstacles such as the coral reef that stopped the marines, and the time and range of the tides.

That was the program for the sturdy volunteers at Fort Pierce. The survivors of the challenging training were organized as small units, structured with six enlisted men and one officer per combat demolition unit and shipped off to England with the rest of the American contingent building up for the invasion of France.

When finally, on 6 June 1944, Allied forces were ready to take Europe back from the Nazis, the first men ashore were the navy combat demolition teams (NCDTs). The NCDT members were tasked with the nasty chore of surveying and destroying the beach obstacles emplaced by the Germans along the Normandy coast of France. These obstacles were an ingenious and extensive array of concrete blocks, steel spikes, mines, and barbed wire that cluttered most of the beaches suitable for amphibious landings. Left in place, they certainly would deter any large force from putting men ashore. And in 1943 the Germans knew the Allies were going to come, sooner or later, and were working as fast as possible to make a beach passage as costly as possible.

When the Allies finally struck, the NCDT men were out in front of the first wave. With the most primitive equipment, utterly lacking effective protection from the chilly water, they swam in to the beach in the small hours before the invasion. Working from one massive obstacle to the next, hanging satchel charges linked with detonation cord, they prepared to clear the beaches for the assault elements.

Dawn that day found an incredible armada off the Normandy coast—thousands of ships and boats finally bringing hundreds of thousands of soldiers back to Europe—and the beaches still hadn't been completely cleared. The NCDT men had been given a tall order, and not all the obstacles had been blown by the time the infantry started in to the beach. As the cloudy sky brightened, German gunners could see, and engage, the men setting charges on the beach whose mission was obvious. While the NCDT men struggled frantically to avoid the fire, emplace the explosives, and blow the lanes for the landing craft, the first wave closed on the beaches.

Even without clear access to some of the beaches, the craft disgorged their cargoes of infantry when and where they could, often under intense artillery and heavy machine gun fire. The NCDT men worked as fast as they could, but even so they found infantry sheltering behind obstacles rigged and primed for demolition, despite warning devices. Some charges blew with infantry nearby, killing them, while other obstacles weren't blown because of the proximity of men from the first wave.

Even so, four lanes were cleared and the assault elements generally made it ashore—if not in good order, at least in one piece, one infantry division after another. The cost for the NCDT force was far higher than for the infantry—about 30 percent at Utah Beach, about 65 percent at Omaha, about 40 percent casualties overall. But, from the point of view of the planners, that was a small price to pay for getting a secure foothold on the heavily defended enemy shore.

Despite the losses and the problems the NCDT units encountered, their work was considered a success and adapted to the island-hopping campaign in the Pacific. They were rechristened underwater demolition teams (UDT), each with a hundred enlisted men and thirteen officers assigned, and retaining the seven-man unit foundation.

February 1969. A SEAL ties a block of C4 into a line of det cord before placing the charge in a Viet Cong (VC) tunnel complex. Vietnam honed the special warfare abilities of the little SEAL community to a sharp edge through an emphasis on small-unit independent operations that made individual platoons and squads responsible for "taking care of business."

"Hey! You said the mud wasn't deep!" The op hasn't even started and this guy is already out of action—up to his knees in mud. The weapon is the infamous Stoner, a 5.56mm machine gun with a tendency to jam at embarrassing moments. When it worked, though, it could chew up whatever it was pointed at, and the idea behind it survives today in the light-weight version of the M60 still used by the squads.

Out in the Pacific the UDT units developed a routine that became part of the standard operating procedure (SOP) for amphibious assaults, some of which survives to the present day. This routine started with a beach reconnaissance four days before the scheduled assault (D-minus-4) with the swimmers inserted just at first or last light. This recon would identify obstacles, natural and man-made, on the intended lanes for the landing craft and armored amphibious tractors (AAM-TRACs), recording each carefully and developing a chart of the offshore, nearshore, foreshore, backshore, and hinterland areas of the invasion beaches.

On D-minus-1 or on D-day itself the obstacles would be blown. The method developed fifty years ago is still taught today because it still works. Here's how they did it:

While naval gunfire and close air support aircraft light up the beach with guns, bombs, rockets, and cannon fire, a small, fast ship makes a high-speed run into the beach. During World War II, modified destroyer-escorts were used and designated attack personnel destroyers (APDs). Several miles offshore the APDs stopped and lowered four LCPR landing craft, each with a rubber duck lashed to the port side. These LCPRs then made a high-speed splash run parallel to the beach, about a thousand meters out, starboard side facing the shore. One after another the swimmers rolled out of the LCPR into the rubber duck and, on command, into the water, forming a line of swimmers. At a thousand meters the small portion of each man's head is essentially invisible, and while the defenders might possibly have spotted one with powerful binoculars, the aerial bombardment and naval gunfire tended to make them worry about other issues.

The men swam ashore and executed their missions, either a reconnaissance or a beach clearance, then withdrew back to the thousand-meter line offshore for pickup, again forming a line of swimmers at intervals. The LCPR came zooming up the line again, with a rubber sling extended. By forming a crook with his right arm and kicking hard just before the boat came by, the swimmer could come up partially out of the water and snag the sling rigged from the inflatable boat, to then be smoothly plucked from the ocean slingshot fashion. One after another the line of swimmers could be quickly and (under the circumstances) safely recovered.

The actual demolition of the beach obstacles also became something of an art form, still practiced today. That technique sent swimmers in to assigned obstacles with satchel charges essentially identical to the ones used today. The flank swimmers at either end of the line carried long rolls of "det cord" instead of explosives; while the other swimmers were busy installing the satchel charges, the det cord was strung from one end of the beach to the other. The satchel charges were each tied into this det cord, and then most of the swimmers began to withdraw. Finally, the ends of the det cord were double-primed, once from each end, with a blasting cap and time fuse. Using waterproof fuse lighters, the fuse was lit, and the whole team formed up out at the thousand-meter line for pickup. When either of the fuses finally burned down to its blasting cap, the powder train was initiated; the det cord linked all the charges and caused all to go off within a small fraction of a second—hopefully when the swimmers were already well offshore and safe from the blast effect and chunks of concrete and steel that rained down after such a mission. After Normandy, UDT losses dropped to only about 1 percent from the approximately 40 percent of the first large-scale operation, thanks largely to this technique. By the end of the war, thirty-four teams, including about 3,500 officers and men, were in action in the Pacific.

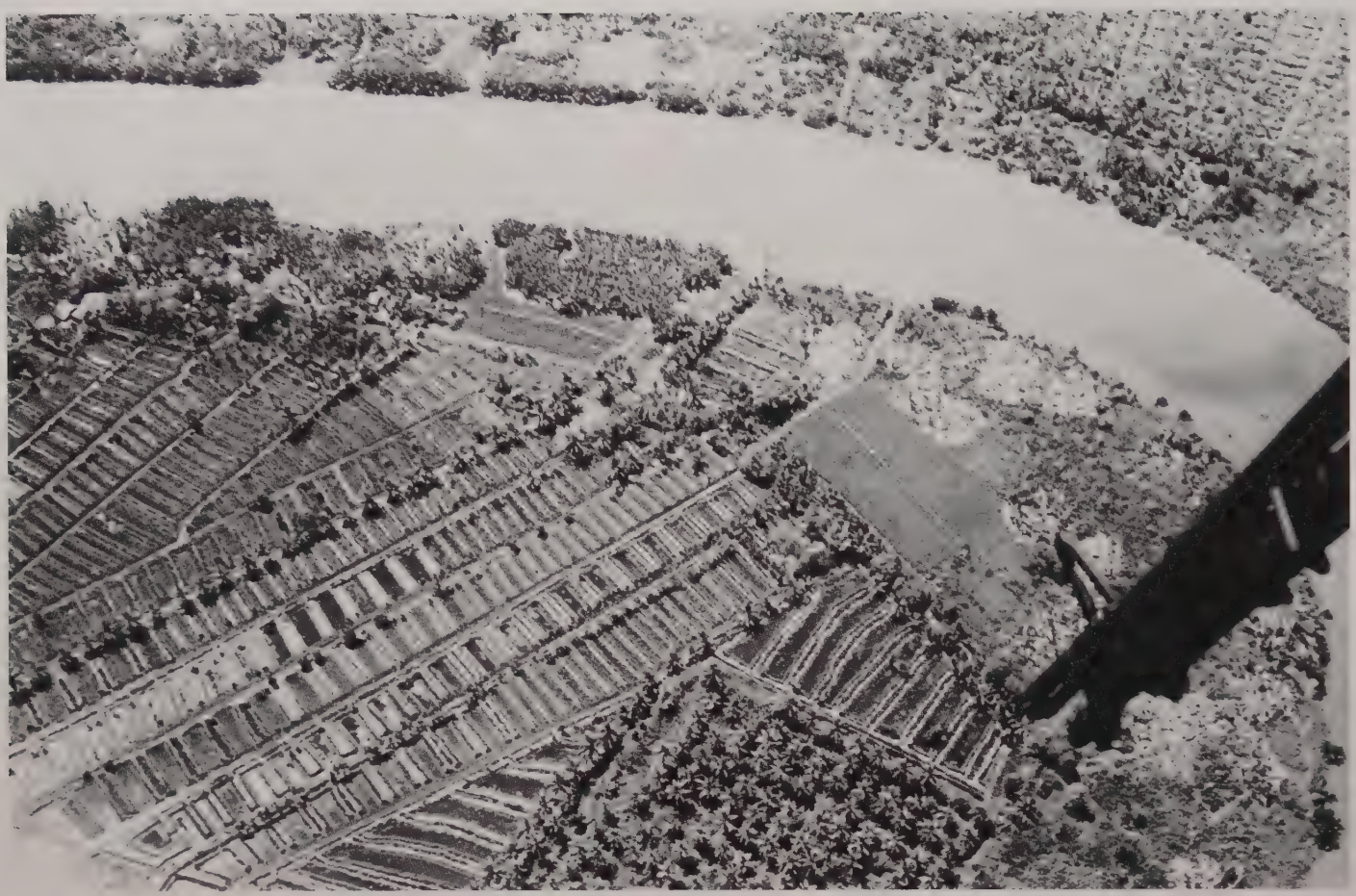
## Korea

In the grand American military tradition, much of the equipment and experience of the UDTs in World War II was discarded promptly after VJ-day—only to be reinvented a few years later. For UDT that came in September 1950 with the audacious amphibious landing at Inchon, Korea.

With United Nations (UN) forces trapped in a shrinking perimeter at the southern tip of Korea by a rampaging, nearly victorious North Korean army, General Douglas MacArthur and his staff designed an "end run" operation on the enemy, with the port city of Inchon on the western coast of the peninsula, near the already fallen capital of Seoul, as the target.

The harbor at Inchon is a treacherous one, with an extreme range of tides that would make the timing and execution of any amphibious operation extremely critical. To minimize the danger, UDT was used to provide detailed information about channels, docks, tides, and defenses. They cleared channels of mines the hard way, by hand, swimming in line-abreast and attaching charges to the mines as they were encountered.

After the Inchon invasion totally changed the complexion of the war, with the North Koreans reeling back, the UDT units were used again, but not just for beach recons and clearance missions. Their skill and experience earned them assignments to blow bridges, railroads, tunnels, and similar targets well away from the beaches.



From a thousand feet overhead, the farms and rivers of Mekong Delta look deceptively tranquil in this pre-op recon photo. Within the lush growth along the river are likely to be bunkers and fighting positions. Inland, among the fields and groves, may lurk more enemy facilities and stores—and the enemy himself. *Gary Stubbenfield*

Korea was the first of a series of nasty little wars that didn't conform to the expectations of the strategic planners in Washington, but that didn't prevent soldiers, sailors, and marines from having to fight them. Korea didn't really fit what the American public expected, either, and consequently support for the war and the men fighting it slowly ebbed a bit until the stalemate was formalized with a truce in 1953. But Korea expanded the mission of the organization that would soon be rechristened "SEALs" and included guerrilla operations behind the lines, parachute jumps, and other missions quite different from those envisioned ten years previously during the bigger conflict of World War II. And more was yet to come.

## The Vietnam War

Although the ancestors of the units and the missions that would become the navy's and army's special operations forces existed during World War II, it was not until 1962 that they achieved real recognition and support. The support came from President John F. Kennedy, a student of international conflict and unconventional warfare. Kennedy had read the works of Mao Tse Tung and Che Guevara, and he understood the changing nature of conflict away from nuclear confrontation to brush-fire wars. While the United States was reasonably well prepared for the former, he knew better than many of his generals and admirals how badly the United States was prepared for unconventional warfare.

Kennedy was aware of the British success against guerrillas in Malaysia in the late 1950s. The Brits turned the guerrilla's tactics and strategies around on them, learning to live in the jungle where they fought and winning uncounted little battles. Kennedy perceived a warning and an opportunity. As a newly elected president, he was in a position to make things happen, and he did. He didn't invent the SEALs or the Green Berets; both organizations already existed but were allowed meager resources and roles.

The army, in particular, loathed the fledgling special operations units that existed at the time. They refused to play fair in exercises

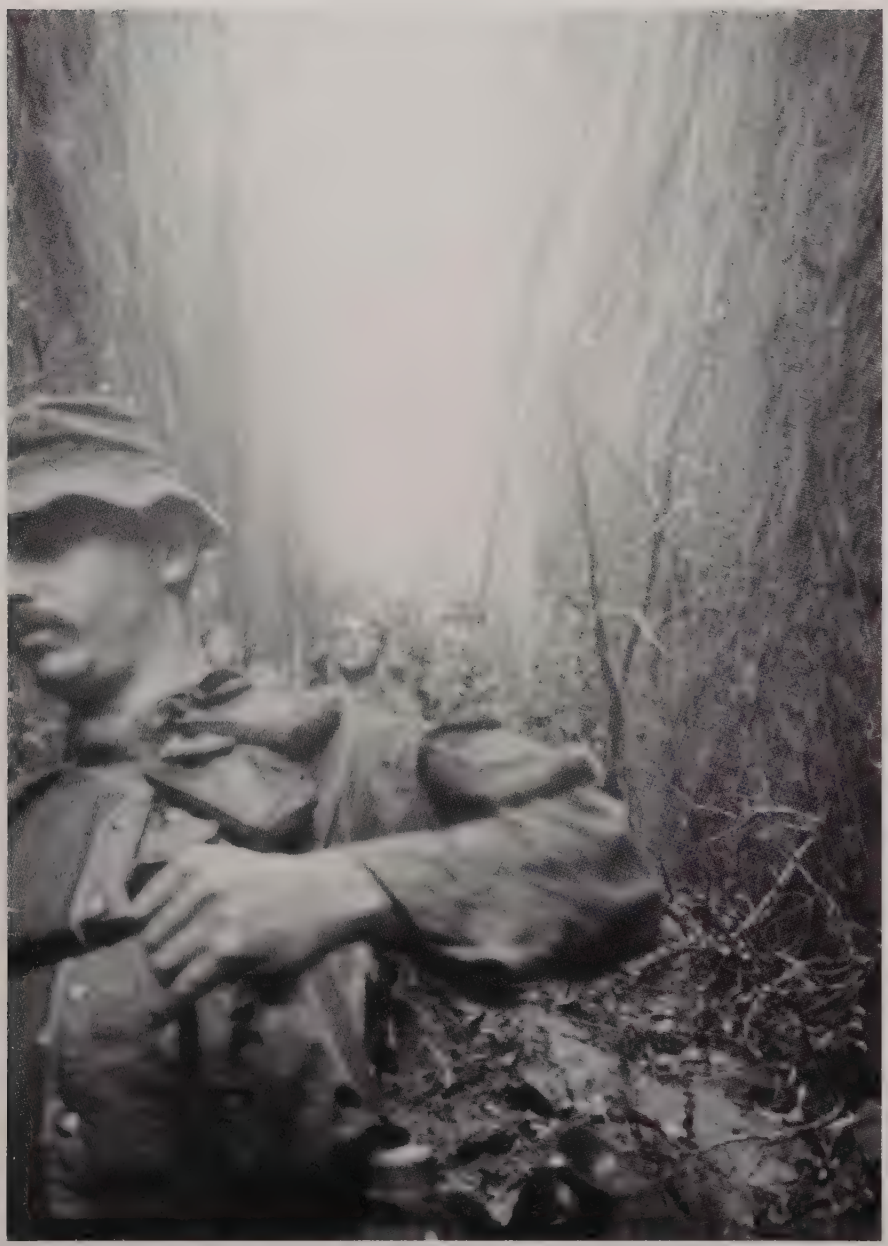
and frequently disrupted the intended outcome. As a result, wearing the green beret was a court-martial offense at Fort Bragg—until Kennedy showed up. The navy wasn't as parochial, but the UDTs were still hardly a barnacle on the chain of command.

Kennedy put the whole Department of Defense on notice that there was about to be a change of mission. The change was from a focus on a northern European, NATO-versus-Warsaw Pact conflict, to the kinds of wars Kennedy thought the United States was likely to actually have to fight. He said, "This is another type of warfare, new in its intensity, ancient in its art—war by guerrillas, subversives, insurgents, assassins—war by ambush, instead of by combat—war by infiltration instead of aggression; seeking victory by eroding and exhausting the enemy instead of engaging him. And these are the kinds of challenges that will be before us in the next decade, if freedom is to be saved—a whole new kind of strategy, a wholly different kind of force, and therefore a new and wholly different kind of military training."

Kennedy insisted not only on new training, new organization, and new strategies, but on new weapons and equipment as well. He was responsible for the development and introduction of the AR15/M16 rifle and the jungle boot, with its steel insert to protect against punji stakes. But it was the development of what became known as a *special warfare* capability within the U.S. Department of Defense that was one of Kennedy's most inspired and enduring legacies.

The army's special forces (known popularly but unofficially as the Green Berets) and the navy's SEALs and SBSs share many things, including missions, heritage, and a strong sense of mutual respect. Both were developed, at Kennedy's insistence, in the early 1960s. At the outset, both were envisioned as extensions of the World War II Office of Strategic Services (OSS) teams that

A patrol boat, river (PBR) noses into the shoreline to de-bus a squad of SEALs. Swift, stealthy, surprising ops in the Mekong delta essentially turned guerrilla warfare around on the VC and NVA, keeping them off balance and insecure. It was accomplished by a skillful combination of boat crews and SEAL teams, operating together in a way that still makes sense. *U.S. Navy*



After calling for help, the squad runs off the mountain—right through this tiny pass. Overhead are the NVA, momentarily distracted by Cobra gunships firing up their positions. The squad, expecting a shower of enemy grenades at any moment, is on the run. Lieutenant Bob Gormly leads the way, followed by Clay Grady and Ed Bowen, none of whom are too thrilled about the op. *Bob Gormly collection*

parachuted behind enemy lines to train, equip, lead, and inspire the native population, a catalyst that used a few men to put hundreds of soldiers in the field. It was called *unconventional warfare* and it was a good idea. It worked—in some times and in some places.

## Birth of the SEALs and SBSs

The SEALs were officially born on 1 January 1962, with President Kennedy doing the honors, commissioning Teams One and Two, assigned to the Pacific and Atlantic theaters. The original mission was to conduct NSW, which then meant unconventional warfare, counterguerrilla, and clandestine operations in maritime and riverine environments. This meant, theoretically, the capability to destroy enemy shipping and harbor facilities; infiltrate and extract friendly force agents, guerrillas, and escapees; conduct reconnaissance and surveillance; conduct counterinsurgency civic action; and organize, train, and lead paramilitary forces.

The new organization got its first taste of real world operations shortly thereafter, conducting operations in support of the Cuban Missile Crisis in 1962, and again in 1965 in the Dominican Republic. Neither lasted long or received much attention, but both put the teams under the kind of pressure that only happens during genuine hostilities. It was a useful rehearsal for the big war that was about to begin. SEALs in small numbers shipped out to Vietnam in 1962, working out of Da Nang and functioning in an advisory role to the Vietnamese navy, much as the Green Berets were doing for the of Vietnamese army at the same time.

SEAL Team One trained up and deployed two platoons to Vietnam in 1965, assigned to operate in the Rung Sat Special Zone near the capital city of Saigon. These platoons started operating in areas never previously visited by American or Vietnamese forces, deep in the mazes of rivers, creeks, and channels where the communist South Vietnamese rebels, or Viet Cong (VC), had been safe. The platoons set up listening posts to collect information on VC activity and ambushes to turn the VC activity off.

The poor VC would come cruising back from a night on the town, shooting up the nearest government outpost, collecting "taxes" from farmers going to market, or assassinating mayors or other officials who might be friendly to Saigon, putting along a deserted stretch of canal in their sampans on the way back to base all fat, dumb, and happy. Then, suddenly, the canal bank would erupt as machine guns and rifles opened up from an

artfully prepared ambush. The VC were either killed or captured, their operational routine disrupted, and their influence over the local population severely reduced. The American SEALs were turning a VC tactic around and using it effectively. It just wasn't fair, somehow! It was stealthy, sneaky, and utterly unexpected—just what Americans were not supposed to be able to do, setting the tone for the conduct of NSW to the present day.

The results from this preliminary experiment were quite successful, and four additional platoons were soon sent, two assigned to Nha Be, one to Binh Thuy, and another to My Tho. With a headquarters element, Detachment Alpha, set up at Subic Bay in the Philippines, the SEALs were ready to lock and load. Detachment Bravo went aboard an APD as a component of a beach recon group, Detachment Charlie went aboard two fleet submarines (the USS *Perch* and USS *Tunney*), and Detachment Delta was sent to Da Nang, Republic of Vietnam. Detachments Echo and Foxtrot went aboard the amphibious ready group standing off the coast, with assignments to assist with demolitions and beach surveys. But it was Dets Golf and Hotel, the riverine patrols, that most frequently closed with the enemy and where much of the legend of the SEALs in that war was built.

SEALs were again deployed to Vietnam in 1966, first to the area around Saigon and later to the rich, heavily populated Mekong Delta. The platoons did their workup together, deployed together, and returned together after six-month tours. This made for a kind of intimacy and unit cohesion far stronger than the main force army units in the country at the time, where soldiers rotated in and out of units individually for one-year tours.

In some important ways, the lessons of the SEAL platoons and teams during the war in Vietnam have been ignored and overlooked. Within the limited areas in which they operated, these little units became highly effective in a generally ineffective war. Their efforts were independent of a larger strategy and so failed to have a lasting impact on the bigger campaign, but they did show what could—and still can—be done by extremely small, stealthy units operating in a maritime environment.

The platoons were given tremendous freedom to conduct their operations as they saw fit. They developed their own intelligence, plans, and procedures, and executed their missions pretty much without interference or support from the army or air force or from the local Vietnamese military commanders.

Although they avoided working with the local Army of the Republic of Vietnam (ARVN) as much as possible, the SEAL teams often included Vietnamese SEALs. Some of these men were very good; they provided excellent translation services and often exhibited a high degree of combat discipline.

The most common and appropriate use of the SEAL teams were in ambushes, recon missions, and prisoner snatches. The small size of the units, even when supported with gunboats and ground-support aircraft, normally kept the platoons from engaging anything bigger than an enemy platoon or, if it couldn't be avoided, a company or even a battalion. Their flexibility and experience, the effective and efficient support from the boat units, and the air and intelligence teams attached to the SEAL platoons all made for a successful fighting force and a style of operations that is extremely different than that used today.

In the Mekong Delta, particularly, SEAL operations ranged from simple ambushes to complex joint operations, staged from navy ships located over the horizon, involving transit to the beach in small craft. SEALs used army helicopter gunships, naval gunfire support, U.S. Air Force fast-movers, and army helicopters again, this time the slicks for extraction from hot landing zones. SEALs also ran the provincial reconnaissance units (PRUs) as part of the exotic Phoenix program.

Platoons at the time used fourteen men, but a typical mission usually called for no more than seven. Intelligence collection for an operation usually took several weeks and was developed concurrently with other operations. The platoon leader would design a mission around resources and objectives. Helicopters would be laid on for gunship fire support, the boats would be scheduled, an interpreter and a Vietnamese SEAL assigned. The helo crews were briefed, the squads received a warning order, and then, when the plan was fully refined, they got an operation order. Gary Stubblefield, a retired SEAL commander, says, "Briefings in those days took one hour, an hour and a half, max. We already knew our SOPs, we already knew our area. All we had to do was catch up with the changes required for the specific mission. The hard part was the 'actions at the objective' portion, where we got really detailed.

"Typically, we'd leave some time after dark, insert sometime before midnight, maintain an ambush until about daylight, break the ambush, and get back in the boats to go back to the base."

## A War Story

Captain Bob Gormly has commanded SEAL Teams Two and Six, UDT-12, and NSW Group Two during a long career in NSW, just concluded. As a young lieutenant he went to Vietnam with SEAL Team Two's first deployment to the

combat zone in 1967. SEAL Team Two was sent to the Mekong Delta, a hotbed of enemy activity, in the first use of the SEALs in that part of the country—though Team One had been working for some time up to the north, around Saigon.

"Our operations at first were kind of 'touch and feel,'" he says. "We were always searching for a strategy that we fitted into—and we never found it—but we had a lot of fun. Us young lieutenants had tremendous freedom about how we wanted to run an operation. We couldn't be told by anybody to run an operation that we didn't want to do."

Back then the entire delta was considered "Indian" country—hostile territory. The only real U.S. presence was the Navy River Patrol Force (CTF-116), which used PBRs to patrol the major rivers for about a year, getting shot at regularly. The VC had pretty much free run of the rest of the area.

The problem for the newly established SEALs from Team Two was first to find out what was going on. That required an intelligence information program, something that began immediately with requests for overflights, interrogations of prisoners, radio intercepts, and similar information-gathering techniques.

Gormly developed his own little plan for how he wanted to operate. First, the SEALs wouldn't go where other friendly forces could operate—there probably wouldn't be anything there, and it made coordination with friendly forces more efficient.

After considering the available intelligence information—the intel, as it's called—Gormly would call for a navy Seawolf helicopter and go for a ride. He flew over the area he was interested in to get a sense of the lay of the land, looking for signs of enemy activity. Although there were no U.S. forces in the area, other than CTF-116, there were a few trustworthy American officers in the delta who could help keep the chaos and confusion to a minimum.

"Then I'd land at the subsector headquarters to meet with the senior U.S. advisor, usually a U.S. Army captain or major, who would be working with the local Vietnamese provincial and subsector commanders. I'd walk in and tell him, 'Hi, I'm Bob Gormly. I've got a SEAL team, and we want to operate in your subsector—and I don't want anybody else to know about it but *you*.' To a man, they all agreed to that condition. Then I'd tell them, 'I'm going to be out there sometime in the next three or four days. I'm not going to tell you when. Just, please, don't put H&I [harassment and interdiction artillery fire] in there.'

"Then I'd go back to base, get the platoon together, start running whatever intel we had on the place, setting up to go. We usually went the next night.

"Just before we launched, within six hours, I sent a UNODIR [unless otherwise directed] message . . . a *flash* message that went to all higher headquarters that began 'Unless Otherwise Directed,' and indicated where we were going. Never once was I told not to go. Then we'd hop in the boat and head down river.

"We traveled very light, only small arms, plus an M60 machine gun and an M79 grenade launcher. The briefing was simple; I made sure everybody had the equipment they were assigned, then I told them where we were going, when, and what we were going to do. 'Any questions? No? Let's go!'

"We jumped in the boat, a twenty-two-foot trimaran and took off. The boat was a seventy-five-mile-per-hour boat that we made into a twenty-five-mile-per-hour boat by adding a lot of weight in the form of ceramic armor, weapons, and a lot of people."

The SOP for ambushes involved cruising down one of the main rivers or canals into the general area of the objective, inserting several kilometers ("klicks," in the trade), and walking in to the ambush site along another canal. A typical mission involved a boat trip of fifty kilometers or so up the lazy river, as fast as possible for most of the trip, then as quietly and innocently as possible for the last few klicks. Navigation in the confused maze of canals was a tremendous problem, generally one the skipper of the boat was responsible for. If he was good you arrived where you planned to go—if not, you could have a real problem.

The most dangerous and vulnerable concern was the problem of getting off the boat and into the local woodwork without being noticed. Nearly all insertions were done in the middle of the night. Rather than run the boat up into the weeds and debark the patrol in obvious fashion, the insertion was usually conducted in a more sneaky way. While the boat motored along in normal fashion, the team members merely stepped off the stern in patrol order, swam ashore, and slithered up on the bank. They all waited silently for ten minutes or so, listening for any movement that might indicate they'd been compromised and that enemy forces were moving in to investigate. If that happened, the boat could be recalled for an emergency extraction. Otherwise the mission proceeded according to SOP and to plan.

In the delta, the patrol moved out into the rice paddies, staying off the dikes and away from the treelines where enemy soldiers were most likely to be. Movement was extremely slow and careful, the SEALs moving quietly toward the intended ambush site, normally a canal bank, usually several klicks from the insertion point.

"Although we were in a free-fire zone where everything that moved at night was considered enemy," Gormly says, "we were more selective. Unless I actually saw weapons on the boats we would call the boat over to the bank and search it. If they were 'clean' I'd just take the sampan down the canal a ways and hold them there while we waited for somebody else to come along. One night we had to wait for four sampans before one came along that belonged to the bad guys."

SOP for that kind of contact was for the patrol leader to initiate the ambush, typically at quite short range where the M60, the M16s on full-auto, and the M79 grenade launcher's focused fire shredded the wooden vessel and its crew. The team would wait for the leader to fire, sometimes with full-tracers, the signal to "hose down" the enemy vessel. "Seven guys carry a *lot* of firepower," Gormly recalls. "If it was a good hit and there were a lot of weapons aboard we might stick around to see what happened—maybe somebody would come over to investigate. Then we could ambush them too!"

Members of a SEAL team are put ashore utilizing a navy landing craft (LCM), to begin a mission in the Rung Sat Special zone of South Vietnam. Trained to conduct unconventional or para-military operations, each SEAL is a qualified parachutist, a former underwater demolition team (UDT) member, proficient in at least one foreign language, and an expert in all types of hand-to-hand combat and self-defense measures.

After the patrol leader was satisfied with the evening's mayhem, the order to move was given. The detained boats were released, much to the relief of the fishermen aboard, and the SEALs would move off toward the extraction point. The pickup boat was already somewhere in the vicinity for the scheduled recovery of the team, waiting for a radio call. The team was recovered and headed back to base for debriefing and chow. In a couple of days it would be time for another briefing and another mission.

This pattern was used for the vast majority of SEAL missions of all types, including recons and prisoner snatches, with slight variations. Recons involved insertion around two or three in the morning, then patrolling into a predetermined overwatch location, setting up a "hide," and staying very still all day. Air or artillery fire could be called in on targets of opportunity. Finally, late at night, the SEALs patroled back out to be extracted.

While this was a pretty efficient way of running operations, it was hardly without risk. Gormly was asked to send a team onto Cu Lao Tan Dinh, an island in the delta where enemy gunners routinely shot up passing patrol boats from fortified bunker complexes. With several patrol boats standing by for fire support, the team inserted at first light on 7 June 1967, loaded with hundreds of pounds of C4 explosive, blasting caps, detonation cord, and fuse.

Once ashore, Gormly's motley crew "sneaked and peeked" finding lots of bunkers in the process but not encountering any of the loyal opposing team. With the patrol boat supplying the demo materials, the team methodically blew up every bunker in sight. They did this for about four hours, moving steadily down

A member of the UDT assists divers in their return to the inflatable boat during the 1972 Operation Springboard near Vieques, Puerto Rico.

the river from bunker site to bunker site. As they left what turned out to be the last bunker complex, Gormly noticed signs of human activity—bent grass where someone had stepped within the previous few minutes, leaving a trail away from the river. The patrol crawled thirty or forty meters forward, following the tracks, until Gormly (now on point) saw an enemy soldier, complete with helmet and weapon, in the weeds ahead. "I stood up and hosed him down. Then I got shot—and all hell broke loose! We had walked down the side of an L-shaped ambush—lucky us! We had a *big* firefight, then made our way back to the river where we directed fire on the VC until we could get a boat in to extract us. The helo gunships and the boats stayed there for about eight more hours, shooting it out with the VC. I got shot through the wrist. The guy that shot me was no more than five feet behind me. We had a Vietnamese SEAL with us, and he hosed that guy down. I was *real* lucky—he shot me over my right shoulder. At first I didn't even know I was shot. I thought my rifle had jammed and blown up—then I noticed the gaping hole in my wrist and realized I'd been shot. That was kind of a stupid op, but it was fun for a while!" It also turned out to be worth a Silver Star for Gormly after his SEALs wrote him up for the award.

## Grenada

After Vietnam the armed forces of the United States suffered another postwar decline and was—as so often in the past—unprepared for the kinds of real world operations that always seem to materialize. But the failed Iranian hostage mission, among other factors, had begun to revitalize the conventional armed forces when, on 23 October 1983, the SEALs went off to war again, kicking off Operation Urgent Fury in Grenada.

Urgent Fury was, sad to say, pretty much a "goatscrew" for special forces generally, and for the SEALs in particular. The SOF community and the national command authority learned many lessons from the operation, but (as usual) it took the bloodshed of the former to educate the latter.

## Point Salines Recon Air Insertion

On point for Operation Urgent Fury was one platoon of SEALs from Team Six tasked with a recon mission of Point Salines, a thin point of land at the extreme southwest end of the island on which the Grenadans had constructed a new

airfield. The platoon's mission objective was a preinvasion recon of sites for amphibious and airborne landings. Their plan, which they developed themselves, involved an insertion by parachute of the sixteen men and their patrol boat, light (PBL)—a mil-spec Boston Whaler speed boat—near a navy destroyer, the Clifton Sprague. Once in the water, the SEALs were to find the boat, assemble aboard it, rendezvous with the Sprague, take on more SEALs and three U.S. Air Force combat controllers, and slip ashore for the recon. Planning such a complicated operation is one thing; making it happen in the real world is another.

Everything went wrong: instead of jumping at last light, as planned, the mission was late by six hours and the SEALs jumped into pitch black night, making link-up with the boats and the men extremely difficult. Then, overloaded with equipment, the SEALs were driven deep below the surface of the water on landing. Despite the use of flotation devices, three SEALs drowned at the very beginning of the insertion phase of the op. Others survived by jettisoning as much gear as possible from their 100-pound-plus loads. On the surface, one of the two PBLs couldn't be found. The five survivors simply floated on the surface, unable to execute the mission, awaiting rescue that would come at dawn with the arrival of the *Sprague*.

One of the SEALs in the other squad drowned on landing. That squad managed to recover its PBL, collect its survivors, and begin the execution phase of the mission. They found the *Sprague*, linked up with the other personnel, and headed in to the beach—only to encounter an enemy patrol boat and withdraw back to the destroyer.

They tried again the next night. This time another patrol boat came by; the crew killed the engine of their PBL and waited silently for the threat to pass. When the patrol boat was safely out of range, the SEALs tried to start the engine again—without success. They floated, dead in the water, for eleven hours before the *Sprague* came along. The airfield recon mission was, as they say, a "learning experience."

But elsewhere another SEAL recon mission was going off with more success. Using a more conventional (and less risky) fast boat insertion technique, elements from SEAL Team Four operated in direct support of the marine amphibious unit preparing to conduct an assault on the Pearls airport, in the midsection of the little island. Bus service for SEAL Team Four was provided by Seafox crews from SBS Twenty. Late on the evening of 24 October the Seafoxes, heavily armed with machine guns and grenade launchers, got the SEALs ashore.

One element moved off to scout the airfield while the other conducted a beach recon. The result was good news and bad news. The bad news was that the beach wouldn't work for an amphibious assault—the reef and surf made it too hazardous—and the airfield was well defended. But the good news was that the SEALs provided the information before the assault was launched, enabling the task force commander to execute Plan B, a heli-borne troop lift. (The marines executed their part of the show with precision and grace—then got back on their ships and went off to their original mission in Lebanon).

## Beausejour Radio Station Takedown

The SEALs had two other assignments: the first was a takedown of the radio station at Beausejour; the second was a rescue, with U.S. Army Delta teams, of the imprisoned British Governor General, Sir Paul Scoon. Scoon was being held under house arrest by Cuban and Grenadan forces involved in the coup at Governor's House, on a hillside above St. Georges. Both went badly.

After difficulties with helicopter insertion at the radio station, the SEALs from Team Six successfully captured the facility and defended themselves, first from an enemy vehicle that blundered into their perimeter, and then from a counterattack force that included a potent, Russian-built BTR armored car. Although the BTR was killed, a lot of the infantry with it were not, and the SEALs had to beat a hasty withdrawal to the sea. After a successful escape and evasion, they made it to the water, swam out from the shore, and illuminated their infrared rescue strobes. The strobes, invisible to the naked eye but brilliant on thermal imaging systems used by the helos and ships, attracted attention quickly, and the team was quickly picked up. More lessons learned for all hands.

## SEALs to the Rescue at Governor's House

Meanwhile, over at Governor's House, another learning experience was in progress. First, the helicopter pilots couldn't even find the landing sites on the maps and photographs. Finally, after a lot of thrashing around, the sites were identified, but—oh joy—although they looked usable in the aerial photographs, they turned out to be utterly unsuitable in reality. The defenders, alerted by all the activity overhead, had plenty of time to collect their weapons, ammunition, and a spot to work from. Then, instead of rolling over and playing dead as expected, they sat up and took notice—and aim at the helicopters, which they then shot up.

A force of about two platoons of SEALs fast-roped to the ground and made a dash for the compound, quickly seized it from a light force of police, and collected the governor and his family and staff. They then took up defensive positions—just in time. Another reaction force, again using a BTR, arrived on scene, complete with about a platoon of infantry. With the BTR beating up Governor's House with its heavy machine gun and the infantry maneuvering on the place, the rescue operation was not going *quite* according to plan.

Among the many missing items from the SEALs' bag of tricks was the radio they intended to use to call up support from the many gunships in the air. Instead, all that was available was a low-power, short-range squad radio designed essentially for coordination within the platoon. But at least it could talk to the Rangers and other units in the area and, by a series of relays, the SEALs were able to get an air force AC-130 Spectre gunship overhead.

When a Spectre fires, it is essentially turning a firehose on the target, but with bullets instead of water pouring from its 20mm Vulcan rotary cannon. It is equipped with systems that permit incredible accuracy and precision target identification. And when the Spectre opened up on the reaction force, the party was over for most of them. According to one report, the crew of the aircraft reported to the SEALs after a firing run, "I see twenty 'flappers' and 'kickers' and seven 'runners.'"

Although the assault on Governor's House was held at bay, the enemy force was not driven off. The SEALs and the governor were to wait all night to be rescued by the marines, more than twenty-four hours after the operation began. It was, in the vernacular, a learning experience again.

While these operations were hardly textbook examples of the art, they were typical of the "first blood" encounters of inexperienced units throughout history. They revealed many inadequacies in doctrine, training, equipment, planning, and execution. Those lessons were studied and learned by all the armed forces, and major changes were then applied. The essence of these was to improve the integration of all the U.S. SOF into one force with different, mutually supporting talents: the U.S. SOCOM assembled from army, navy, and air force units in 1986.

## Panama

By the time Operation Just Cause kicked off in Panama in December 1989, SOCOM had come a long way in the process of integrating U.S. special operators. In addition to better planning integration, all the forces had experienced better funding and received more attention as the NCA shifted the nation's military focus away from the Warsaw Pact threat toward the little brushfire wars and terrorist threats that now seemed more dangerous.

SEALs had two major assignments during Operation Just Cause: the *Presidente Porras* mission described earlier, and a mission with a similar objective, disabling Noriega's Neville Jet at Punta Paitilla airport. While the first mission went off pretty much according to the plan, the airport mission was a disaster.

The jet was identified as one of several likely ways Noriega might escape the noose prepared for him. While there were many options possible for taking it out of his game plan, the mission was assigned to the SEALs. The SEAL team, basing its plan on guidance from a higher headquarters, decided to send two platoons onto the airfield to seize the aircraft. When H-hour was pushed up fifteen minutes for the whole operation, the SEALs found themselves trying to play "beat the clock," and losing. The force of approximately forty men was discovered on the airfield and engaged in the open by some PDF who knew their stuff. The Panamanians fired low, skipping their bullets across the concrete. The SEALs took many hits—four dead, eight wounded. Although the Neville Jet was essentially destroyed, by accident, in the engagement, the mission was hardly a success. It even took an hour and a half to get the wounded out; another learning experience, and a bitter lesson for all concerned.

But they did learn from it, directly and from the after-action reviews that followed, formally and informally. As the commander of the operation said to one critic, "You weren't there!" And he had a point—it is easy to be an armchair admiral (or lieutenant commander) and a different matter to do it under fire.

## Persian Gulf, Round One

Special operations forces generally get tapped to fight the little wars and smaller skirmishes that tend to be forgotten rather quickly by the public and historians. One of these little operations, designated Ernest Will/Prime Chance, involved SEALs in the Persian Gulf long before that big "drive-by-shooting" called Desert Storm. These operations deployed U.S. forces, in and out of SOCOM, to the Persian Gulf during the war between Iran and Iraq. The purpose of the operations was to keep the sea lanes clear and secure for the passage of oil tankers, a rather tall order since the belligerents were indiscriminate about just who they were attacking and their use of mines, missiles, and the occasional small attack boat.

This photo shows UDT trainees practicing swimmer recovery with a class boat near Roosevelt Roads, Puerto Rico.

## Persian Gulf, Round Two

Operation Desert Storm/Shield was the acid test for all the changes that had been incorporated in the U.S. armed forces during the 1980s. SEALs and SBS crews played an active, early, and extremely successful role in the campaign.

One SEAL platoon, commanded by Lieutenant Tom Dietz, set up shop at a small naval base near the northern Saudi town of Ras al Mishab. After the air war kicked off in mid-January 1991, the platoon started an aggressive reconnaissance program along the Kuwait coastline. Four special reconnaissance missions were executed, looking for any and all information about enemy defenses: Were there patrol boats operating in the area? Navigation aids still in place? Then, moving in closer to the beach, what kind of defenses were visible from offshore?

Commander Gary Stubblefield was one of the SEALs sent to the Gulf. His responsibility was to establish a kind of floating base to support a wide variety of trigger pullers from the army, marines, and navy—along with air force controllers—in a demonstration of what has come to be known as "joint-ness." The army personnel operated AH-6 Little Bird attack helicopters and 20mm Vulcan cannons, the marines provided defense for the platform, and all of them cooperated as a kind of guard force for the strategic waterway. For Stubblefield, the mission was twofold: support the guard force in the area with a secure, well-provisioned platform, and use the barge as a platform to stage offensive operations against hostile forces when required.

It was an interesting operation. Several oil platforms were used by the Iranians as bases for offensive operations against shipping; the marines took out some of these.

The SEALs *tried* to take down a couple of oil platforms, and probably would have done it well and perhaps with minimal loss of life. Instead, though, the prep cannon fire on the platforms that was intended to soften them up resulted in both platforms blowing up while the SEALs were about to land. As Stubblefield says, "We were *supposed* to capture the people on the platforms. But the wrong ammunition was used by the [navy gunners]; they were supposed to use armor piercing but used incendiary instead. While we were in the helicopters on the way into the platforms, we got word that they blew up. There was no way we could land on them."

These recon missions had two or three phases. The first was supported by the SBS crews using their extremely fast, low, "cigarette" racing boats—designated HSBs (high-speed boats)—for a fast tour of the area. Although not really designed for the recon mission, the HSBs are normally tasked with training the bigger ships in the fleet against anti-ship attacks from such small, fast vessels, and they don't have an official tactical mission. But that speed made them excellent for these recons. With a Zodiac CRRC lashed to the deck, the boats made nighttime forays along the coastline. Dietz says, "We didn't know if there was going to be an amphibious invasion or not. We were told to look for a beach where one could be conducted—or where a deception operation could be conducted."

The first two missions identified two possible invasion beaches from well offshore. The next two missions sent the SEALs ashore to scout the defenses. The plan for the recon missions used two Zodiac inflatables for the run into the beach each night. There were sixteen guys in each platoon, who all wanted to go in, but only room for five in each Zodiac; Dietz had to decide who would go in the Zodiacs and who would stay in the HSBs. "It wasn't an easy decision," he says. "I integrated

everybody into the missions, and everybody got to go, but there were some guys that went in every night and some that got rotated."

Three SEALs surface swam in to each beach, without scuba or closed circuit breathing apparatus, which seemed unnecessary. Despite the wet suits they all wore and the training and experience they'd developed, all were chilled. As Dietz says, "The difficult thing about these missions was the cold. We were wet the whole time, from dusk until around dawn. That's why we go through BUD/S and why we go through Hell Week—so we can be wet and tired and still think!"

The Zodiacs were put in the water from about ten miles out, then sent in to about a thousand meters offshore where the swimmers slid over the side into the chilly, low 50-degree water. The SEALs surface swam into the beaches, but not out of the surf. They lay on the sand, using the water for cover and concealment, watching and waiting for about an hour. Then, on schedule, they slipped back into deeper water and back out to the Zodiacs.

After reviewing the results of the intelligence collection missions, one particularly suitable beach was selected, just north of a point called Mina Sa'Ud. The fourth mission went in to the selected beach to confirm the assumptions of the earlier recons. Dietz, as platoon commander, went ashore to have eyes on the target, still not knowing if the platoon was supporting an actual invasion or a deception operation. Finally, the decision was made: execute the deception plan.

The plan for the deception operation called for three Zodiacs, and all the men in the platoon would be committed to the mission. Six would swim ashore, a swim pair from each boat; another three would stay behind to provide support. They were to install charges along the selected beach, primed with individual timers set for a two-hour delay. These charges were all supposed to detonate at about 0100 on the day the ground phase of Desert Storm kicked off, with coalition forces crossing their lines of departure at 0400. At about the same time the SBS crews and SEALs would close on the same beaches and fire them up with every suitable weapon they owned.

The charges and the gunfire didn't need to kill anybody or destroy anything to be effective. All they had to do was get the attention of the Iraqis and convince them that the marines, who had been waiting offshore for just such an opportunity, were about to come across the beaches in a classic amphibious assault. If such an invasion actually happened and there was no one to meet it, the enemy commanders knew, the war would be over almost instantly.

But if there were no invasion and the enemy forces were still defending against one, that meant there were fewer enemy assets available to deal with the real assault, coming across the border to the west. So the SEAL platoon's sixteen men, plus the SBS crews in the HSBs, had the opportunity to take two whole divisions out of the war (about twenty thousand enemy soldiers) with what amounted to a military version of a practical joke.

## Execute the Deception Mission

"I've been asked how I picked the 'lucky' six who went in," Dietz says. "I basically chose the nine people who needed to stay back in the boats—my three best engine guys, three best machine gunners, three best radio operators—and the other six were left. But on the final operation I was able to take everybody. That's because we needed everybody."

Although the SEALs didn't see the need for Draeger scuba gear, they each took along a little "bail-out bottle" of air sufficient for about three minutes of subsurface swimming in case they made serious contact with any enemy defenders. The bottles were the kind of field expedient solution to a problem that seems to materialize during war—they'd been acquired from a helicopter unit and adapted to an entirely different use (and a prohibited one) than that for which they were designed.

Of the six SEALs who swam in, three carried CAR15s, the compact version of the M16A2 with a shorter barrel and a stock assembly that could be retracted. The CARs all had M203 grenade launchers attached for serious, long-range, indirect fire. The other three carried the German Heckler & Koch MP5 submachine gun with suppressers (not silencers) attached. "The idea was that if a couple of sentries showed up on the beach, and we thought we were compromised, we could take them out with the suppressed weapons without giving away our positions," Dietz says. "But if something heavy opened up on us—a machine gun, for example—at longer range, we could lay some grenades on it."

Each of the six swimmers carried a Mk 138 satchel charge. Two timers were attached to each, set for two hours. This kind of "double priming" is SOP. In the bags were ten 2-pound blocks of C4 explosive, dual primed, the charges all carefully prepared ashore before everybody climbed into the water.

The swimmers went in to the beach on line, about twenty feet apart. Once they could touch bottom with their flippers, they spread out, about 50 meters from each other across the 250-meter-wide beach. "You could just see the guy on either side of you," Dietz says, "and we didn't have to wait for any signals. Once we spread out, we swam into the beach and placed our charges in about one foot of water—since the tide was now receding—

UDT-11 personnel ready an inflatable boat beside an Apollo 14 command module mock-up surrounded by its flotation collar during a practice recovery mission in San Diego Bay, California.

pulled the pins on the timers and swam back out to regroup." The Zodiacs, which had been standing by about 500 meters off the beach, were signaled in for the pickup. Once the swimmers were hauled aboard, the rubber ducks headed out into the Gulf, about 7 miles off the beach, to the rendezvous point with the supporting SBS crews in the speedy HSB cigarette boats.

Four of the HSBs participated in the operation. Two HSBs collected the Zodiacs and the SEALs, counted noses, and secured the inflatables. In the meantime, the other two zipped in to about two miles. Now, at about 0030 hours, the active part of the deception plan began as the two HSBs closed to 500 meters of the shoreline and opened up with every weapon aboard: mini-guns, heavy machine guns, grenade launchers. "They ripped the beach apart," according to the platoon leader. The firing continued for about ten noisy minutes. For any Iraqis ashore, this would obviously not be bombing or naval gunfire, but a large scale, close in attack of the type preceding an amphibious assault. On their final pass up the beach, the HSBs chucked several additional explosive charges overboard—more C4, wrapped in plastic, primed to go off in the water at irregular intervals. These detonated as the boats made a break for the exit. About five minutes later, almost exactly at the scheduled hour of 0100, the satchel charges ashore started exploding. All went off within about thirty seconds of each other, with a series of tremendous *booms* that were audible far out to sea, where the HSBs beat a hasty strategic withdrawal.

All four linked up out at the seven-mile mark, then headed back to base. At 0230 they debriefed. "It was a very low-key, matter-of-fact debrief," Dietz says. "The operation went according to plan. We were happy but not really excited about it. What we were really excited about was that the ground war was now kicking off! It wasn't until later, after we'd gotten cleaned up and had something to eat, that we got a message from Captain (now Rear Admiral) Smith, the task group commander, reporting that elements of two Iraqi divisions remained on the coastline even as the ground forces were going up behind them. They remained in position to defend against the amphibious invasion. That's what really pleased us—that the Iraqis paid attention to us, reacted to us, and hopefully we saved some lives."

Chapter 3

# EARNING YOUR FLIPPERS AT BUD/S

A visit to the infamous mud flats is one of the memorable joys of Hell Week. *Eric Logsdon, U.S. Navy SPECWARCOM*

Opposite page: Climbing the cargo net is harder than it looks; it squirms and sways with the movement of the men negotiating it. The instructors demand each student go as fast as he can—or faster. But the real challenge comes at the top, when you have to scramble over the log and get a good grip before heading back down. With your arms seemingly on fire from the long climb, it is easy to loose your grip while trying to make a hasty transition from one side to the other. Students fall from this and other stations on the O course and some are seriously injured. *Eric Logsdon, U.S. Navy SPECWARCOM*

So you think you wanna be a SEAL? No problem—piece of cake. Anybody can do it! It only takes twenty-six weeks, and the training is mostly done on the beautiful, sandy beach at Coronado, California, right on the Pacific Ocean near warm, wonderful San Diego, and the program is run by a large, kind, attentive, cheerful, and well-trained staff of SEALs. There are always plenty of beautiful women strolling by to admire the handsome sailors; the famous and luxurious Hotel Del Coronado, with its superb restaurants and bars, is right down the road. There is plenty of sailing, surfing, scuba diving, and other recreation available in the immediate vicinity. The beach is always available for a nice jog. And, best of all, every instructor at the BUD/S program is committed to making sure that every day of those twenty-six weeks are just loaded with

Once a BUD/S student gets through the first phase of training, the job skills become part of the program. These four Phase II students are preparing for a surface swim in the frigid Pacific. All students discover on Day One how cold the water is, but by this part of BUD/S, they have the comparative luxury of a wet suit for protection against hypothermia. *Eric Logsdon, U.S. Navy SPECWARCOM*

activities and experiences you will never forget. Sound like fun? Sign right here!

Well, Navy recruiters don't actually sell prospective recruits that rosy view of the program. But despite many cautions, SEAL candidates often show up at BUD/S without a realistic understanding of what is actually involved in the training required to earn the Budweiser trident emblem of a SEAL. The truth is that it is one of the most difficult, challenging, and actually brutal learning experiences anybody can have, and one of the things most people learn is that they don't really want to be a SEAL quite badly enough to finish the program.

Like the army's Green Beret qualification course (or Q Course), BUD/S is a *selection* and training program that weeds out people who don't belong—that usually means most of them. They are weeded out the only way that anybody has ever found for reliably selecting people who can hack the problem—by cranking up the stress so high that only the strongest survive and the quitters quit—or break. It is not nice and it isn't pretty. There isn't any other way. And sometimes it results in nearly every member of an entering class of SEAL candidates being eliminated. In one class *not one* single man graduated. It is a calculatedly brutal experience that is not pretty to watch and pushes its victims to their limits of physical and emotional endurance, and beyond. Injuries are routine and deaths in training occasionally occur.

But, in a way, it is true that anybody can survive it—if they have the appropriate state of mind. It takes plenty of strength, but most of it isn't muscular; it's mental. If you've got the mental strength to work through the discomfort, the fatigue, and the humiliation, you can probably develop the physical strength, SEALs tell you. The head is the hard part. And no other test has, so far, been able to figure out how to find the men who won't quit from those who will without pushing them both far beyond the normal limits of civilized routine.

The BUD/S training takes twenty-six weeks, but it is only one part of the process of becoming a fully qualified SEAL. Before even applying for training a prospective candidate must pass the very strict physical examination for navy divers; have eyesight at least 20/40 in one eye and 20/70 in the other, correctable to 20/20, without color blindness; score high on military written tests; be male and twenty-eight years of age or less; and pass the physical fitness test. Extremely high scores are expected on the fitness test, which includes a five-hundred-yard swim (breast or side stroke) in less than twelve

*Above and right: On the third night of Hell Week, students begin to think it can't get any worse and that they've experienced the worst evolutions the cadre have to offer. Their feet are getting raw, each one has gone without sleep for seventy-two hours, and everything hurts. Instead of mercy, the cadre pushes them all a little harder and deeper into their misery in an effort to see who breaks and who bends under the strain. Some guys will quit here. It is said it will get worse. Eric Logsdon, U.S. Navy SPECWARCOM*

and a half minutes (followed by a ten minute rest), forty-two push-ups in two minutes, at least fifty sit-ups in two minutes, eight pull-ups, and a mile-and-a-half run in boots and BDU pants in under eleven and a half minutes—all totaling less than an hour.

Applicants must come from certain navy ratings, have the endorsement of their commanders, and have plenty of time remaining on

their enlistment. If you fit all these requirements you can apply, and you might even be accepted and assigned a slot in a class. If that happens, don't wait to start your physical conditioning program. You don't go to BUD/S to get in shape; you *arrive* in shape, or you will fail almost instantly. "In order to even apply," Rear Admiral Ray Smith says, "you've got to be a top-notch sailor. We've got the pick of the guys coming out of the Naval Academy, more enlisted applicants than we can handle."

Although the published standards call for a cutoff age of twenty-eight, older men are sometimes accepted, and some are even recruited. Two thirty-six-year-olds have completed the program, and at least one man was thirty-two at the time. While the older bodies are a little less resilient sometimes, that can be offset by greater maturity and better self-discipline. One of these, a Polish refugee with extensive language skills, a former teacher and, at the time, a competitive gymnast, was recruited for the program and made it through training on the first try.

New arrivals will indeed see the marvelous Hotel Del Coronado, the pretty sailboats, the girls sunbathing on the

beach, and the glittering Pacific Ocean and will soon learn that the Pacific is freezing, that the beach is for running on and rolling in, that the girls and the tourist attractions exist only as torture devices.

For seven long weeks the trainees endure a program of indoctrination and physical preconditioning, with long hours of classes, running, swimming, sit-ups, pushups, calisthenics. They sweat and struggle . . . but they still haven't started BUD/S yet.

## The Only Easy Day Was Yesterday

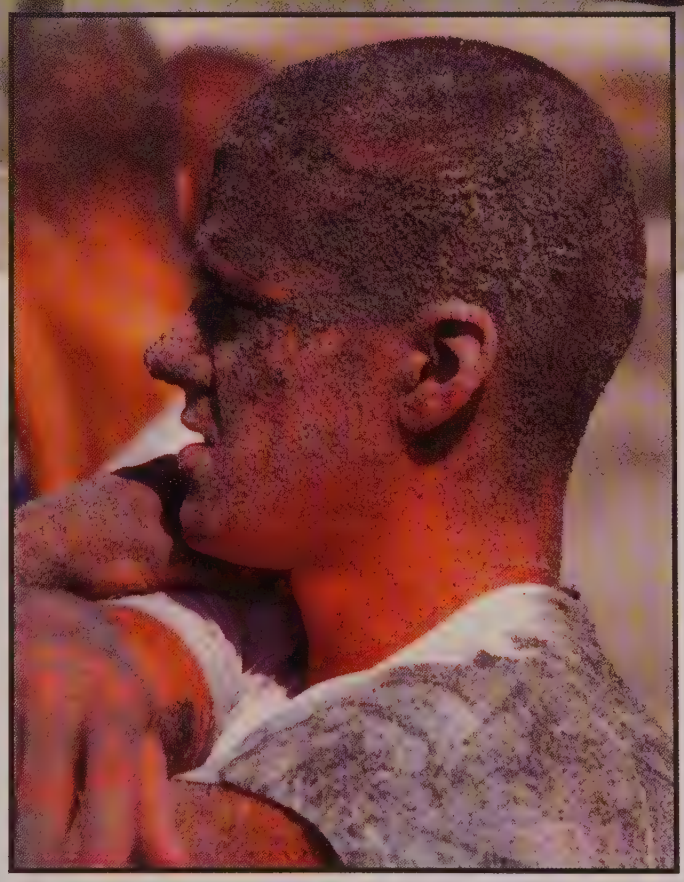
Phase One of BUD/S is the basic physical and mental conditioning portion of the program. It lasts nine weeks. It features a lot of running, swimming, and trips around the obstacle course. Every trainee is required to put his maximum effort into every test, every time. The minimum scores are raised each week. Each trainee is required to improve on his previous scores. Instructors watch and evaluate every hopeful trainee like hawks—or vultures—ready to pounce on any flaw or failure, real or imagined. It is an extremely abrasive, competitive process. The only way the instructors will leave you alone is if you've just beaten everybody else at an event; then you might be allowed a few minutes to gloat and relax while the rest of the class thrashes around in the surf zone.

This continues for five weeks. Each day the heat is turned up a little more. The instructors push harder and harder; they never let up for a moment. As they say over and over, "The only easy day was *yesterday*!"

The students spend lots of time in the water, and the water is cold, even in summer. Hypothermia is a fact of life and occasional death. Wet suits are sometimes used, sometimes not; even with the suits, the cold Pacific Ocean seeps in, lowering body temperature. Students can be seen shivering violently some-

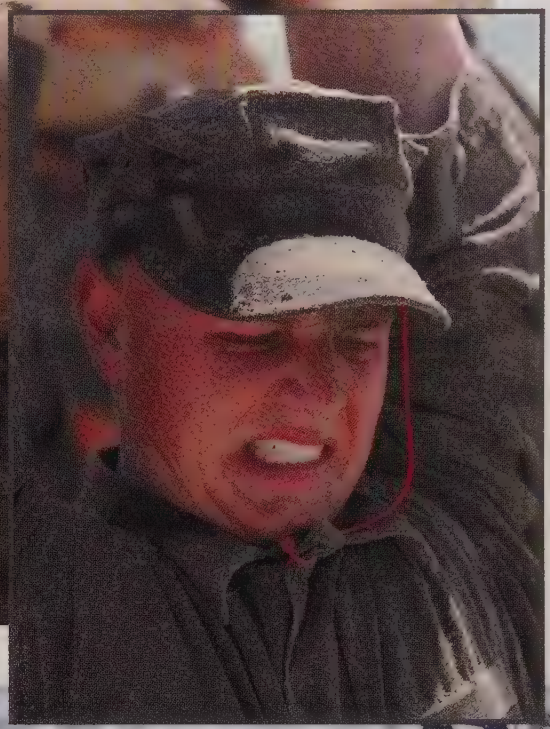
Previous page and above: Despite five days with almost no sleep, the last morning of Hell Week will keep anybody awake. The cadre make sure of that by firing M60 machine guns and artillery simulators while the students who haven't quit yet crawl around on the ground while being yelled at. There is no fixed time when it all stops; that is up to the commander and the staff. This student is within an hour or two of the order to suspend Hell Week festivities. *Eric Logsdon, U.S. Navy SPECWARCOM*

The low crawl under the wire is always a popular event on the O course and is one of the easier stations, except when you have to go through it on your back, like this.



"Get wet and sandy!" is the command, and off the students dash to the surf for a quick dip in the chilly ocean. Then they run back to the berm where each must roll around enough to get completely coated with sand. The result is extremely uncomfortable. It is even more uncomfortable to be the last one to make the trip, or to do a poor job of getting sandy. If that's the case, the instructor will yell at you for a while and make you do it all over again. "It pays to be a winner," the instructors say, and they are right. The effect is known as a sugar cookie.

Many of the ordeals for BUD/S students require superb teamwork skills, but few of the students have ever had to work with others with such precision. Log PT is one way to fix that deficiency because all five or six men must work in unison to get anything done with this heavy and awkward object. And the instructors demand that the logs be carried up steep sand dunes or held aloft for extended periods until the student's muscles begin to fail.



times after having come out of the cold ocean to stand in the cold wind. It is another stress, intentionally applied.

One by one people quit or are removed for injuries. Even quitting isn't easy, quick, or dignified; the trainee stands on the green painted frog footprints at one side of the "Grinder," the big blacktop space where calisthenics are performed, grasps the lanyard for the brass ship's bell attached to a column, rings the bell three times, and is gone. His green helmet liner remains in formation beside the bell with the others who've quit before him. While there is some disgrace to it, even these men get some credit (in private, away from the trainees) that it takes quite a man to get through any of BUD/S and that only a very select group even manage to get in the front door. While the quitters get credit for trying, they are, just the same, an example to those who remain.

## The O Course

One of the featured entertainments is the obstacle course—the "O course" in SEAL parlance. It looks like a big sandbox with lots of play equipment: telephone poles assembled into a wide variety of structures. The BUD/S trainees are assembled here about once a week for an hour or two of play time. One after another, on command, the students dash off for a circuit of the course.

You start by running to the first event, a set of pole stumps set in the ground, their tops about two feet above the deck. You must run across them, jumping from one to the next without falling off. Then, from the last stump, leap to the top of a low wall, swing a foot over, drop to the other side, and start running. You'll go about fifty feet before you dive under a grid of barbed wire—crawl under the wire, then emerge and dash to the next structure, the net climb. A tall tower suspends a rope net that you climb to the top, swing over, and descend; the flexible net offers unstable footing and it is slow going. Once safely back on the ground, dash off to the next position, a pair of simple structures about four feet apart; you climb up on one and jump to the other, catching the crossbar across your chest; this is a favorite way to break a rib. They call this one "The Ugly Name." There are about ten more obstacles to negotiate, and your progress will be closely monitored by one of the attentive, helpful staff who are always ready with words of encouragement and advice. If you have trouble with part of the course the instructors will probably let you try the event all over again, just to make sure you get it right. Finally you return to your starting point and your time is recorded.

If you haven't done well you may get to cool off with a quick dip in the ocean, on the other side of a tall sand berm. Then, to dry off, you'll be expected to roll in the sand, then hustle back to rejoin the play group. As the trainees quickly learn, the O course is highly competitive, and people who don't do well are subject to extra, undesired attention from the instructors.

You're expected to go all out every time you run the course, and you're expected to do better every week. Minimum times for the course are published, and they get shorter every week. It is just one of the stresses that are applied to the trainees to test their motivation and physical conditioning. But, as one of the staff says, "It isn't supposed to break you, but to build up your confidence. It reveals a lot about the character of an individual. By the time you've gone through about three-fourths of it, every fiber of your muscles is burning, and you still have another quarter to go—and it's all through soft sand."

## Hell Week

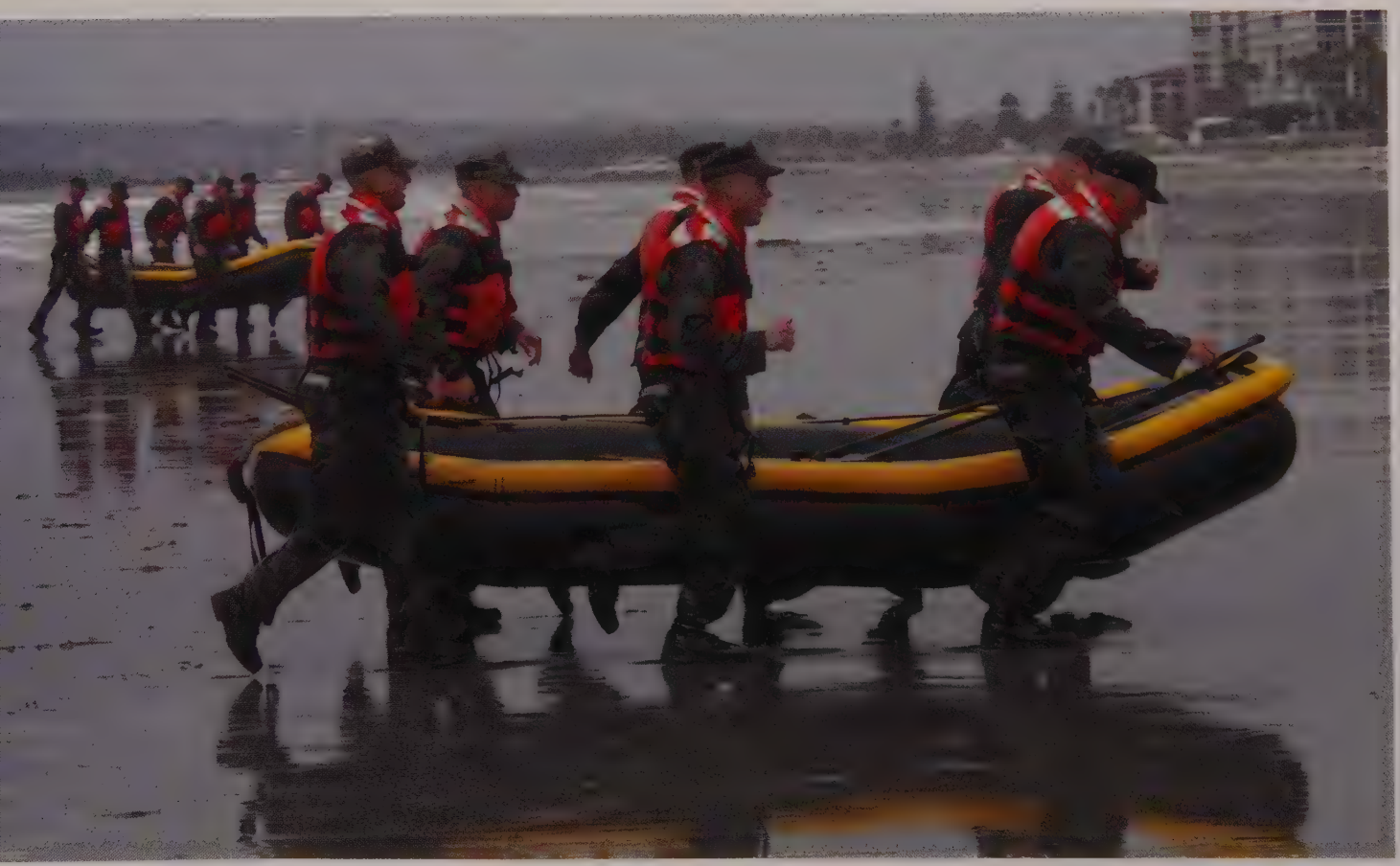
After five weeks of this comes the real challenge that all have heard about and dreaded: Hell Week. It starts just before midnight on the Saturday before the sixth week with a gentle wakeup call from the instructors . . . using blank M60 machine gun fire and artillery simulators as an improvised alarm clock. The noise in the compound is deafening. Besides the firing, instructors scream incessantly. Chaos reigns supreme.

The trainees begin five and a half days of virtually constant activity. They will receive an average of about twenty minutes sleep per day, if they are lucky. They will go from one event to another, constantly: running on the beach, boat drills, PT, swims. They will crawl in slime, roll in the surf, and for a little extra torture, do "log PT."

Log PT requires boat teams to lift and maneuver sections of log weighing from four hundred to six hundred pounds. If your boat team hasn't been doing well (or if the instructors think you need a little extra help with your motivation), you'll get the six-hundred-pound model. Then you can do sit-ups with it on your chest, or try holding it over your head for a while. Needless to say the whole team has to work together to do anything with it at all.

The sun comes up on the first morning, and the day proceeds much like any other at BUD/S. The sun goes down, and the trainees know that somewhere people are returning to homes and wives, to quiet evenings and friendly conversations. In the tall apartment buildings overlooking the BUD/S compound the lights will start going out around nine or ten. The PT continues. By 1:00 a.m. they are nearly all out, but the activity on the beach continues. "The only easy day was *yesterday!*" scream the instructors.

BUD/S is an unusual program in many ways, one of which is that officers and senior NCOs train alongside junior enlisted sailors. They have to perform the same exhausting evolutions required of the younger men, plus they have to lead as well. This leading petty officer directs his men as they prepare for boat drills.



The Navy calls them inflatable boat, small, or IBS, but the informal term is sometimes "itty bitty ship." Learning to use them in an effective way is another teamwork exercise and another place where it really pays to be a winner. Even when the surf is low, as it was the day these photographs were made, inexperienced students have trouble going in the right direction and occasionally get tumbled into the water when their IBS broaches.

Much of the first phase of BUD/S training concentrates on the IBD surf drills, endless launches and recoveries and races between crews. The process grinds down every student at the same time it teaches teamwork and the value of coming in first. The water is cold, the sand is abrasive, the boat is heavy, and the instructors are never happy.

When the sun comes up the next morning, the trainees will be a bit tired but will try not to think about it. All of them know what the routine is, that the really tough part is still days away. The competitions continue with boat races in the ocean and on the bay. Gradually, individuals will fail. When they do, their teams are subjected to more stress from the instructors and from the other teams.

Although they don't get any real sleep, the trainees get plenty of food. They consume about seven thousand calories a day and still lose weight.

One day melts seamlessly into another without rest. There is no alternative but to tough it out, drive through the fatigue, and keep doing what they tell you to do. It is a test of mental toughness as much as the powers of physical endurance. After four days or so people start to hallucinate. And some people start to quit. Hell Week is the most important part of the whole twenty-six-week BUD/S experience, a physical and mental challenge that is intended to put the trainees under stress that is supposed to approach that of actual combat.

The hallucinations can be rather entertaining. While enduring a long night boat race out on the ocean, after a few days with no sleep and little rest, visions begin to appear. Sometimes it is mermaids, other times people picnicking on the beach, or a strange tunnel vision.

One of the rituals is the letter home. Toward the end of the week, when everybody is off in the ozone, they are all seated before tables and provided paper and pen. "Write me a letter explaining why you want to become a SEAL!" the instructor orders. This is not an easy thing to explain after going three or four days without sleep, wallowing in the mud, doing log PT, enduring endless boat drills, and slogging through competitive events like the rubber duck races on the ocean or the sixteen-mile runs on the beach. The students tend to stare at the paper for a while before attempting to write anything. The results tend to be gibberish. Later, after Hell Week is over, these essays are returned to their authors as an amusing reminder of the tremendous stress they were under and how it affected their performance of even this simple task.

As rough as Hell Week and the whole BUD/S program is, it has been toned down considerably from the past. Trainees no longer have to wallow in the mud of the Tijuana River, essentially an open sewer, after many came down with severe (and sometimes permanent) illnesses. That ended in 1983. A somewhat healthier goo is now available right in San Diego Bay. And after one trainee died on a five-mile winter swim around San Clemente Island, the staff started taking extra precautions to deal with extreme overexertion and hypothermia. An ambulance now trails along the beach behind the trainees on the long runs through the soft sand, trailing the "goon squad," as the slower runners are called; they can quit at any time, and many do.

BUD/S has been criticized, along with other extreme selection and training programs like the army's Green Beret Q Course, for unnecessary extremes. The injuries, the high level of stress, the humiliation are all far more than anyone in civilian life or in normal military training ever must endure.

Why do it that way? As one SEAL officer explains, "One of the things I've noticed about many of the 'real world' combat operations I've been on is that you get a tremendous adrenaline rush—I call it *fear*. Once the operation begins that goes away, but on the way in you have a lot of time to sit and think. You *never* get that in a training situation! So one of the things I continually tell my troops while we are training is, 'Look, I can't give you the feeling of what it is really like to be in combat . . . because I can't shoot at you and make you hurt. It's illegal, and I wouldn't want to do that anyway. What I *can* do is to make the conditions so tough, and try to make you so tired, put you under such stress, that you will get something of a feeling of what it is like."

When the trainees recover from Hell Week they begin a period of study intended to prepare them for "hydrographic reconnaissance," as beach surveys are called. This involves even more time spent wallowing around in the surf, cold and miserable, while the ever-attentive staff offers suggestions and encouragement from the beach. Once through Hell Week students are treated with a bit more respect and affection by the instructors. Finally, Phase One is over.

## Phase Two

Survivors of the first part of training go on to Phase Two, where they learn about diving operations. Each learns just about all there is to know about scuba, closed-circuit re-breathing systems, and dive physiology. They learn more than they ever wanted to know about the nasty things that happen to people

Opposite and overleaf: Welcome to the Grinder, a large open courtyard that serves several purposes for BUD/S instructors. It is used for daily PT where students execute seemingly endless flutter kicks, push-ups, and pull-ups. Each arrives in excellent condition, but that condition is never good enough for the instructors who demand increasing numbers of perfectly executed routines for each exercise.

Upper body strength is essential for many of the common tasks of SEALs and nobody even gets through the front door without the ability to do a lot of pushups and pull-ups. Those muscles are further tested and strengthened with daily PT that challenges every student's commitment and ability.

who make mistakes underwater. They learn to deal with equipment failures, lost regulators, the hazards of nitrogen narcosis. They make long swims beneath the surface and learn to navigate in the cold, murky, dark waters in which SEALs operate. After seven busy weeks the BUD/S class is missing a few more faces. The survivors have the knowledge necessary to be basic combat divers, and the program then gets really interesting.

## Phase Three

By now the BUD/S class is beginning to see light at the end of the proverbial tunnel, and the students are pretty sure it is not from an oncoming train. They are far stronger physically and mentally than four months earlier. They've acquired a great deal of knowledge and confidence. Now they get to start putting the skills and the stamina together in practical exercises that simulate SEAL missions.

Phase Three is the demolitions/recon/land warfare part of the program. The BUD/S students learn land navigation, explosives, small unit tactics, rappelling, and patrolling skills and become expert in the employment of all the small arms and weapons used by SEALs in combat. After four weeks of classroom instruction and practical exercises, the trainees deploy to San Clemente Island for five weeks, where they put it all together.

One of the evolutions involves clearing beach obstacles like those that faced the amphibious operations of World War II—concrete blocks and steel rails dropped in shallow water to block the passage of landing craft. The students first make a careful hydrographic survey of the landing zone, noting the location of all obstacles, then plan a mission to demolish them with explosives. The quantity of explosive has to be carefully calculated, fuse measured. The students use their rubber ducks to get into the area, then dive to emplace the explosives. All the charges are linked with det cord to ensure simultaneous explosion, and the divers are recovered to the boats. The last dive pair pulls the safety pins on the fuse-lighters, retracts the striker, and pops the igniter. Now it is time to get back to the boat. The instructors will time the delay, and it had better be within a few seconds of what was calculated. With a satisfying *whump*, the surface of the water will boil and the obstacles will (usually) be shattered.

Above and opposite: Phase III students don't escape challenging PT, even out on San Clemente Island. These men are participating in an evolution known as flight quarters that involves a short run up a hill, but with complications. Each student is required to try to imitate a navy aircraft of one sort or another while carrying a heavy, awkward object and yelling aircraft-like noises. The iron anchor chain link weighs about a hundred pounds and represents the cargo of a transport helicopter; the barrel symbolizes an aerial refueling tanker.

BUD/S is probably the roughest, most demanding training and selection program in the U.S. armed forces, at least outside the covert organizations. It has been loudly criticized as excessively brutal. Although it might not be quite as dangerous as at times in the past, it is a guaranteed way to get miserable fast and stay miserable for most of six months—or more, if you get injured. And the injuries are common, almost with the intent of the staff. No other program tolerates such a high level of injuries. A lot of people outside NSW think the BUD/S program is sadistic and ought to be reformed. Commander Gary Stubblefield has an opposing view:

"It is the toughest military training in the world, and it's done that way on purpose. The army's special forces don't have anything to compare to it. It's been this way since the days of the Scouts and Raiders in World War II, a *very* difficult selection process. Most of the people who make it through the program are not premier athletes—they are *normal* people who have the ability to stick with something.

"There are injuries, some severe, in every class. But the business we are in is inherently dangerous, combat or not. If you take away the risk that goes with the training, you take away the mental stress that you put people under to know how they'll respond in the real world, in actual combat. Landing on rocks, long cold swims, surf passages—training where we have people break arms and legs—has to be part of the program. You *have* to be sure that they will stick with you when the going gets tough, and they have to know that, if you don't do things safely, there are consequences that include injury . . . or worse. Death in training is very, very rare, and it happens, I think, when the student doesn't follow the rules. The deaths are an anomaly but the injuries are not—those happen when someone does something they aren't supposed to."

## Jump School

But even after surviving BUD/S, a trainee is still not a fully qualified SEAL and does not wear the trident insignia of NSW. First comes three weeks at the U.S. Army's Fort Benning in Georgia, undergoing the basic airborne course. Here each will have to confront a different fear, that of jumping from an airplane, to become a fully qualified military parachutist.

The first week involves physical conditioning, and since the army school's standards are comparatively low, the BUD/S graduates manage this part of the program more or less with one hand tied behind their backs. The army instructors will try to make the experience a little bit challenging for any SEALs, rangers, marines, or others they can identify, usually requiring extra PT to keep their attention, but BUD/S graduates generally consider this part of the program a kind of vacation.

Week two teaches the basic skills of military parachuting: donning the parachute, actions inside the aircraft, door position, jump-master commands, proper exit techniques, emergency procedures, and the parachute landing fall (PLF). The students endlessly practice door position, exits, and PLFs from training aids: the suspended harness, the thirty-four-foot tower, the C-130 mock-up.

Finally, they start week three, Jump Week. Five jumps are required, three "Hollywood" daylight jumps without combat equipment plus one night jump and one jump with a loaded rucksack and weapons container. The night jump is usually a sunrise or sunset jump rather than one in full darkness.

Jump school is actually a lot of fun for many of the people who attend, and the BUD/S graduates hardly work up a sweat. The jumps are often exciting, the instructors fairly civilized, the drop zone a soft, fluffy plowed field. The last jump is generally done on Friday morning, and students often invite friends and relatives to watch from nearby bleachers. Then the army instructors break out the silver wings of a qualified military parachutist and pin them to the shirts of the students.

Martial arts and unarmed combat skills are taught early and often at BUD/S. *Hans Halberstadt/www.militaryphoto.com Opposite:* The O course is run many times by BUD/S students and each must show a better time on every session than the previous session.

Phase II students spend many hours in the pool where the water is clearer than the ocean but not much warmer. Before learning any of the skills of a combat swimmer or diver, each must learn to be comfortable and safe in the water, even with his hands tied behind him.

## The Budweiser

Completion of the basic airborne course is the final academic portion of the program required to join a SEAL delivery vehicle (SDV) team, but the students are still not bona fide SEALs. First, each man is assigned to a team where he must complete a six-month probationary period. It is still possible to fail, and individuals occasionally are filtered out, even now, if they don't fit into the team or fail to meet spec somehow. But at the end of the six months, a year or more after starting the process, a few young men will pin on the big, gold symbol of NSW and finally be able to call themselves SEALs.

They enter a tiny, select community with a big reputation that sometimes gets in the way of business. Within the military SEALs are sometimes known as "cowboys" or "glass-eaters" who glory in their superman image. Instead they find a different kind of man on the teams: extremely confident without bravado, a man with tremendous talents and abilities, a person who knows his own limit. "We like to think of ourselves as quiet professionals," one says.

Rear Admiral Ray Smith says: "We are essentially a *people* business. We use a lot of exotic equipment—scuba, parachutes, radios—but all those things are peripheral to the essence of what we are. Our focus at BUD/S is on the human being, the nature of the person we want to have come on a SEAL team and do the things we have to do—always has been, always will. The finest equipment in the world (which we have) is not sufficient to accomplish our missions. You'll see guys in BUD/S who don't look very impressive physically—little guys, young guys—who'll surprise you and make it through. You can *never* successfully predict who will make it through! You can't measure what is inside the individual without subjecting him to BUD/S. In fact, this is a course in the development of human potential; all we are trying to do is to make the young man understand that the limits of the human being are practically unlimited."

Escape from the trials and tribulations of BUD/S is never far away. All it takes is three strokes on the bell, and the student is immediately removed from the program and sent back to wherever he came from.

Of the fifty or sixty students who begin BUD/S, the staff will tell you there will be five or six who *know* they are going to complete the program, no matter what, and that there is no stopping them. There are another five or six who don't really want to be here, are not really ready for the challenge, and who will never be SEALs. In the middle are the 80 percent the instructors focus their efforts on. They probe for the fears that every man has—a fear of heights, of water, of jumping from high platforms—and each is confronted daily with his perceived limitations and pushed past them. "You can't call 'time out' in combat," one of the instructors says, "and that's what we try to teach them here."

Officers and enlisted personnel go through training together, unlike some other programs where officers sometimes get an easier ride. Both suffer and perform equally at BUD/S. It is a team-building system, developing trust up and down the chain of command. About 35 new officers and 250 enlisted personnel graduate from BUD/S annually and join the world of SPECWARCOM on the SEAL, special boat, and SDV teams.

Chapter 4

# MOVEMENT TO CONTACT

SEALs and most other operators in American special units are generally HALO trained; the acronym stands for high-altitude (aircraft exit), low-opening (parachute deployment). HALO jumps involve exiting from aircraft at altitudes between about ten and thirty-five thousand feet above ground level; at such heights the sound of an aircraft is inaudible to a person on the ground. And since such jumps are always made at night, the whole process is essentially undetectable. The jumper's parachute is deployed only a thousand feet or so above the ground and he then unhooks his rucksack from the harness, uses his toes to hold it while he steers toward a suitable landing site, then drops the ruck to the end of its lowering line just before landing. Successful graduates of the HALO school are authorized to wear one of the more unusual military qualification badges.

Despite the way it is shown in the movies, the business of going into combat is a lot more complicated than picking up your weapon and following some resolute-looking lieutenant or sergeant who growls, "Okay, men, follow me!" The movies always manage to leave out all the paperwork, meetings, and related homework that comes first. In fact, it is just about impossible for American combat units to go off to battle without a great deal of this stuff. It can take weeks to prepare an operation of any kind, conventional or covert, but at the end of this long process will finally come two quite interesting management/staff meetings. The first of these is called a Warning Order; the other is called the Patrol Leader's Order.

## The Warning Order

Before SEALs and SBS crews go anywhere or do anything, the mission has to be authorized, approved, and planned. A long time ago the units did most of this internally, but for the last decade or so, the missions have been conceived and tasked from outside NAVSPECWARCOM. Somewhere during the process somebody decides it is okay to actually let the teams know that they can cancel those weekend plans. The way this is done is that the selected team is herded into a compartment or room, the area is secured, the doors are closed, and somebody, normally the unit commander, will issue a warning order.

In various forms, warning orders have been around since the Mongol hordes, since Attila, since Alexander the Great. In its short form it sounds something like, "We're going to break camp in the morning before sunrise and attack the infidels, sack their town, and put the place to the torch. Bring your sword, spear, and all your armor. Questions?"

The modern version is more complicated, but the idea is identical. It gives the people involved an idea, usually incomplete, of what they are going to be doing and what they should do to prepare. The formal version (used by the army and marines as well) includes a brief description of the situation; the mission; general instructions, including organization, uniform, weapons, chain of command, schedule, including time for the more detailed patrol order, and for inspections and rehearsals; and specific instructions for subordinate leaders and individuals.

Everybody then scurries around, collecting weapons, demolition material, MREs, fresh batteries for the radios, and night vision goggles. *Nobody* gets to call home and say, "Guess what, Honey, I'm not gonna be home on time tonight 'cause we're off to defend freedom and democracy. . . ."

Instead, they just don't come home in the evening. Sooner or later the families might get some extremely vague information, but that's one of the costs of admission to the special operations and rapid-deployment military communities. And not only do these call-ups happen for real world events, they are called for training, too, with irregular frequency.

The idea behind the warning order is that once the order comes down to the unit, a fixed amount of time will be specified before the operation is supposed to be executed—perhaps

One of the basic missions of SEAL teams is vessel board, search, and seizure (VBSS). Getting aboard the vessel is only the first part of the problem and that is being done here by climbing up a skinny little ladder, and it is less fun than you might think, especially when you are loaded down with weapons and gear, out in the middle of the ocean, on a black night with a heavy sea running. Then you swing back and forth, crashing against the hull as the vessel rolls. If you're lucky, the crew won't notice they have visitors till your team enters the wheelhouse and takes control of the ship. *Eric Logsdon, U.S. Navy SPECWARCOM*

Very few members of the military wear the HALO School qualification badge on their dress uniforms but the technique of jumping from an aircraft at extreme high altitude is another covert insertion technique used by SEALs. The course is taught by the U.S. Army and is attended by members of all the U.S. Special Operations Forces.

twelve hours. The platoon or squad leader is expected to take a third of that time to make his own preliminary plan, and allocate two-thirds of the time to the subordinates to do their preparation and rehearsals. While it often doesn't work out that neatly, the idea is a sound one and is applied as much as circumstances permit.

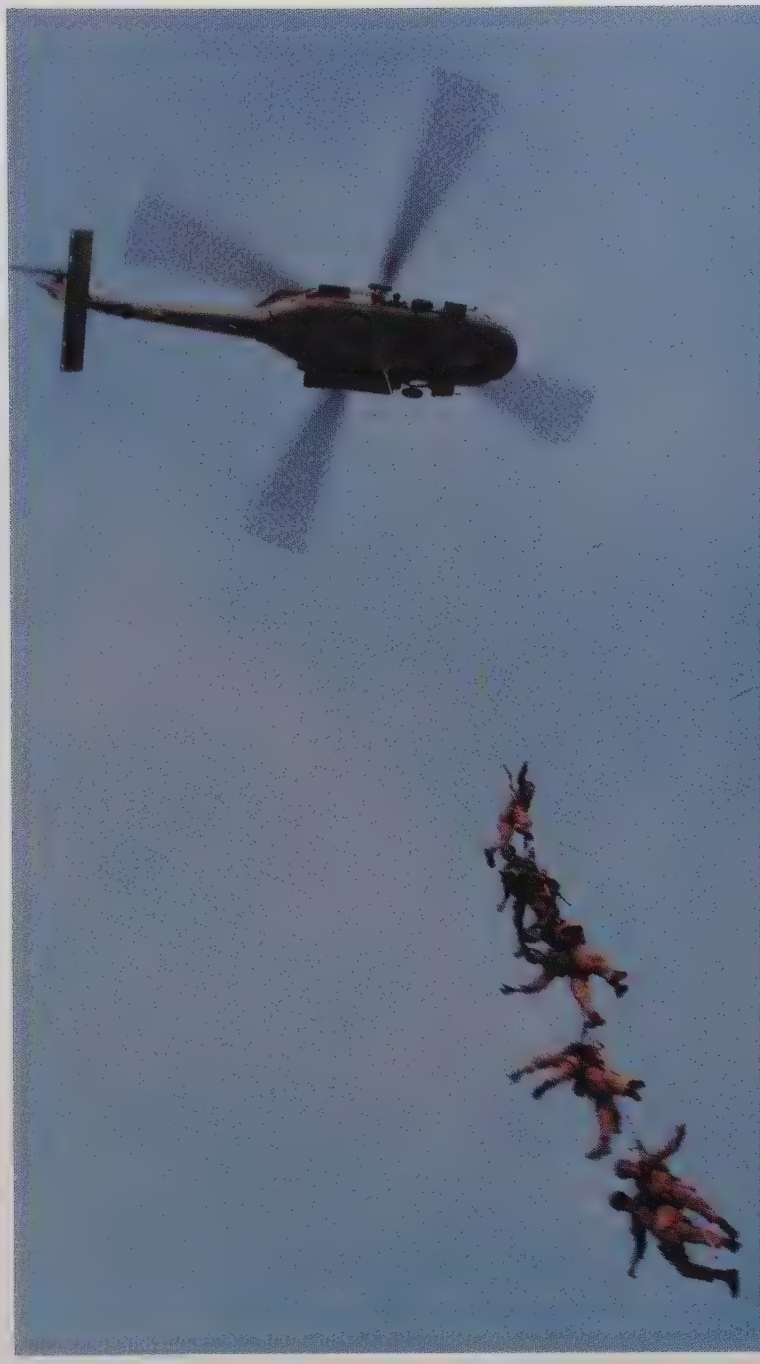
## SOPs

Each platoon has its own set of standard operating procedures (SOPs), its own identity, its unique reputation and subculture, all based somewhat on the characters on the team.

SOPs make planning and executing operations far faster and more efficient than otherwise. When a patrol leader's order is issued, only the unique details of the mission need to be discussed—radio frequencies, rendezvous points, routes in and out of the objective, commander's intent. All the other essentials—patrol order of march, actions on contact, reaction to ambush, individual responsibilities—all these things have been long since memorized as a kind of "company policy" that doesn't need repeating. Most of the members of the teams, like Bob Gormly's SEAL Team Two, had known each other for four or five years and could just about execute an operation without a word ever being spoken.

## Patrol Leader's Order

The five-paragraph format used to formally brief the mission has been in use since World War I, its format memorized by millions of servicemen over the years. It forces the unit to plan logically to deal with an extremely stressful and dangerous experience. The elements of the order are the situation, the mission, the details of the execution, how the mission will be supported and supplied, and command and communications. Depending on the complexity of the mission, the orders brief can last a few minutes or six hours; an hour or so is typical. SEALs may get some of the most difficult and dangerous missions, but they also get some of the very best and most expensive intelligence support, often custom-made for the specific mission. This will



Here and overleaf Special purpose insertion/extraction (SPIE) rigging is seldom used tactically now, but once was a very important way of recovering operators from the jungles of Southeast Asia.

almost always include overhead imagery, photographs from all altitudes, from low level all the way up to the secret satellites like the KA-11. There may be radio and telephone intercepts, and reports from agents in the operations area. And (in extreme and rare cases) a prisoner may be snatched out of the target area, brought back to chat with the team, and held until the mission concludes and the team is safely extracted.

SEALs like to rehearse their missions, and if it is practical to do so, some kind of run-through will be done. This might be no more than a detailed brainstorming conference somewhere in the bowels of a submarine, or it might involve the construction of a mock-up of a target and a complete rehearsal of the entire mission ashore. Regardless, once the patrol leader's order has

It is called helo-cast and recovery, and is another fundamental way to deliver and retrieve SEALs. When they are inserted, the helicopter flies about fifteen feet above the water while maintaining a very slow forward motion; the SEALs drop feet first, close together without the danger of one landing on another. Recovery is done from about the same altitude. The crew drops a ladder and the SEALs clamber back aboard through the rotorwash and ocean spray.

been given, none of the players will be going anywhere or doing anything except preparing to launch into the op area.

When it is time to go to work, SEALs commute in dramatic and dangerous ways. Although trained for insertion to an operating area by parachute, that's really not the SEALs' forte. Except in rare instances, the mission will begin with an insertion over or under the surface of the water.

At any time there are SEALs deployed aboard U.S. submarines operating around the world, waiting for world events to call for their services. When the orders trickle down the chain of command, the SEALs plan their mission and use the most stealthy technique of all to drop in on the enemy—submarine insertion.

U.S. subs have a small chamber, the "escape trunk," installed forward of the sail. This little chamber has two functions, the

The light strike vehicle or desert patrol vehicle (DPV) is a modified version of a civilian dune buggy that saw extensive use during the first Gulf War but that has been largely replaced by modified HMMWV "Humvees" in recent years. SEAL Team Three is reported to still be using them because of their blazing speed on open desert terrain. DPVs have been equipped with Mk 19s, M2 machine guns, AT4 rocket launchers, and even a low-recoil cannon.

first allowing for trapped submariners to escape a boat sunken in shallow water, and the second (a secondary use) allowing for the deployment and recovery of combat swimmers.

Locking out of a sub is not for the faint of heart. The swimmers don their wet suits and their combat equipment, collect weapons, explosives, and related equipment, and prepare to enter the chamber; scuba or Draeger rigs are, believe it or not, optional. Then, one after another, they climb into the chamber, a spherical space about six feet across. Up to five combat swimmers can crowd into the chamber, but all will be extremely cramped and uncomfortable. Even among trained and experienced SEALs panic sometimes occurs as the water is slowly allowed in. There are mouthpieces and air lines installed in the chamber, and it is possible to use the sub's own air supply for breathing until the chamber is unlocked and it is time to leave. But SEALs normally use their own rigs—if they have any. It is quite possible to ascend to the surface without scuba or re-breather, and SEALs train for this free ascent or blow-and-go technique, as well as the reverse technique required to come back aboard.

The sub will slither in as close to shore as the skipper and the SEALs can agree on. Subs are not normally content to be in shallow water close to a hostile coast; SEALs are normally not pleased to swim in from over the horizon. So the typical mission will bring the SSN attack sub into a mile or two off the coast on a dark and hopefully stormy night. The sub will come up to a depth of about forty feet, bring the periscope up for a quick peek at the neighborhood, then bring it back down. The 'scope makes a fair radar reflector, and if somebody is working a surface search radar tweaked for such targets, there could be a problem. So the sub crew gets extremely edgy about this kind of mission.

A typical insertion out of the chamber will have one man go out first, with scuba, and rig the Zodiac stored in the sail locker on deck. The boat will have to be taken to the surface while a tether is left attached to the submarine. This entire complex

Above and opposite: Fast roping is a very common insertion technique that can deliver a SEAL squad onto a beach, oil platform, or ship's deck within seconds. The helicopter crew swoops in to position about thirty feet above the deck and comes to a hover over a suitable landing zone. Each SEAL wears heavy leather gloves and, on the command of the helicopter crew chief, grasps the two-inch rope, then swings out and begins his controlled decent, keeping about ten feet between himself and the man below him on the rope. The technique requires excellent upper body strength to execute safely.

activity is done in darkness, almost entirely by touch, and takes about half an hour. When the diver has the boat properly infiltrated and on a tow, he signals the sub to send up the rest of the SEALs. Even this isn't quick or easy: he can flash a light signal at the periscope if the sub skipper is willing to raise it, he can swim down and rap on the hull, or he can even go back in the lockout chamber, repressurize and have a chat via microphone.

Usually, though, a simple rap on the hull will do it. Then the next batch of divers cram into the chamber, the water level rises, and finally somebody has to wriggle a hand over to the valves and latches that will open the hatch.

"You get into there, you've got all this weight on you, you close the bottom hatch, you stand there, doubled over—tanks on your back, equipment in your arms—three to five people jammed in there. Then somebody has to find a way to reach over to the valve so you can start to flood the chamber. There are some guys who are just more nervous about all this—everybody jammed in that small space, water coming up to your neck. I've seen guys panic in there."

It takes a long time, usually in cold, high seas, for the seven or eight men to rig the boats and exit the sub for a typical mission of this type. Hypothermia and seasickness will be a problem for those already in the boat up on the surface while the nervousness of the sub crew will be a problem for those still aboard. Even the rubber boats have a radar return signature, and if anybody is looking, the whole operation can suddenly become a target instead of a weapon. It is a very nervous time. But then, after perhaps a couple of hours, you're all set and it's time to go ashore.

## Dry Deck Shelter

There is an easier way, a bolt-on chamber that is called the dry deck shelter (DDS). While it operates on the same principle as the lock-out chamber, it is far larger. The DDS is big enough to accommodate a whole platoon, with dive gear and rubber boats, radios and demolitions. It will also accommodate the SDV, the SEAL-scooter that is designed for zipping around underwater. Besides these handy features, it converts to a hyperbaric chamber for treating a diver who's been "bent" from staying under too long, too deep, and acquires the painful, potentially fatal condition called decompression sickness.

While the general insertion technique for the DDS is the same as with the lock-out chamber, it is a lot faster and a lot less

Daylight parachute insertions with the old MC1-1B parachute are not a common event except in training. This parachute is one of the first widely used canopies that can easily be steered but has been largely replaced by the MC-4 ram-air type among most special operations units.

crowded. The whole evolution goes faster, much to the delight of the submarine crew.

## To the Beach

Once everybody's safely in a Zodiac, the SEALs time to break out the paddles or fire up the engine and head to the beach. Several hundred meters offshore, well outside the surf zone, a pair of divers—the scout swimmers—slip over the gunwales of the Zodiac and, with weapons at the ready, move in to secure the section of beach where the landing is intended. After a quick check of the area, they signal the boats to come in. The rubber ducks run in through the surf, everybody alert for enemy contact, and the boats are promptly pulled up across the high water mark and either hidden or buried.

Once secure on the beach, the SEALs are ready to execute the mission. If it is a patrol or a direct action strike deep inland, the squad (or perhaps platoon if two boats have come ashore) assembles itself and prepares to move off into the hinterland without a word being spoken. Communication is done with hand and arm signals, visible and instantly recognizable even on dark, cloudy nights.

Out front, leading the patrol, is the point man who navigates the patrol to the objective. This is traditionally the most dangerous, difficult position in the patrol order, requiring superb land navigation skills and an extremely high level of alertness to the possibility of contact with enemy forces. A point man can walk you right into the kill zone of an ambush, or halt the patrol safely outside. Such choices can be (and often have been) the difference of life and death for an entire patrol. When contact with the enemy is made, the man on point is typically the first to fire or the first to die.

The point man's preferred weapon in wooded terrain is often not a rifle or machine gun but a military version of a standard 12-gauge shotgun, loaded with five rounds of "double-shot" (size 00) buckshot. These are large, bullet-sized lead pellets that spread out in a lethal cone of destruction. One pellet will kill out to a range of about a hundred meters, sometimes farther; at closer ranges, particularly within about ten meters, a well-placed load will punch a gaping hole through a torso, or rip off an arm or a head. It is the approximate equivalent of firing seven or so bullets at exactly the same instant in the same general direction.

An alternative load is the flachette round, with tiny steel darts in place of the buckshot. While these are not nearly as lethal or destructive individually, there are many more of them, and they produce a denser cloud of projectiles, a handy way of providing a group of enemy soldiers at close range with something to think about besides the SEAL patrol. They are lethal out to several hundred meters.

There's yet another handy 12-gauge round for the point man's shotgun, a single, heavy slug useful for opening locked doors and disabling machinery or electronics in one quick, brutal way. It is accurate out to a range of about five feet, maybe six. If it hits something, the target stays hit. This is no precision munition, but it will punch a hole in the cast-iron block of an automobile engine, or the concrete wall of a house or bunker—or, if they cooperate, a whole row of enemy soldiers.

## Riflemen

If the point man bumps into a bad guy at close range and gets the first shot off effectively, the patrol has the choice of either "going to ground" and duking it out with the opposing team or making

a run for the beach. In either case the point man's shotgun will soon have limited utility—it will be out of range, out of ammunition, or both. That's why there are several riflemen on a normal patrol, each with an M16 rifle and five or six thirty-round magazines stashed in their load-carrying web gear.

## M16A2 and CAR15

The M16A2 rifle is almost the same weapon that the fathers of some of today's SEALs carried and fought with in Vietnam a generation ago. It's no longer the most exotic weapon on the battlefield, or on the teams, but it is still a good, light, accurate, effective weapon that has proven itself in countless battles. The latest version is more reliable than the first, which had a failure-to-feed problem for a while. The A2 also lacks the "full-auto" feature of the original, a modification based on the discovery that in the heat of combat the weapon was being used as a "bullet hose," ineffectively spraying rounds downrange. Instead, the rifle has a BURST position on the selector switch on the left side of the receiver, above the trigger; this permits three-round bursts that economize on ammunition while encouraging the rifleman to aim rather than point the weapon.

While the basic rifle issued to SEALs is essentially the same as the M16A2 issued to U.S. Army and Marine Corps infantry privates (and just about everybody else too), the SEALs' version tends to be an upgraded, customized weapon with specialized sights and a collapsible stock or a compact version of the M16 that has been popular with special operators for the last twenty years, the CAR15. This little squirt gun uses essentially the same receiver components as the bigger M16, but with an ingenious collapsible stock assembly and shorter barrel. It trades bulk for a little fragility and a slightly greater inclination to jam. The decision to carry the CAR15 or M16 is—as with similar decisions on a team—partly a matter of personal choice. SEALs, along with other special operators, are permitted to exercise a lot more latitude in the choice of accessories than are troopers in more conventional units.

Depending on the particular mission, the sights installed may be a night-vision scope or a laser aim-point system. The night-vision scope amplifies existing light and presents the shooter with a magnified, green and black picture of the target through a somewhat conventional rifle scope. The other device mounts a small laser pointer under the barrel; once activated it puts a bright red dot where the bullet will strike. You don't need to peep through a scope or iron sights—just put the red dot on your intended victim and squeeze. It is not a long-range, sniping system; but for night combat in confined spaces it is often the system of choice.

The M16 fires a small, 5.56mm (.223-caliber) bullet at high velocity. This makes for a very flat trajectory and a lot of retained energy at practical ranges. The Vietnam-era version of the M16 was supposed to be good out to about 300 meters; today's weapon/cartridge combination is rated to 460 meters—about a quarter of a mile. That means that a trained rifleman can hit a man-sized target at that range with about 50 percent of his carefully aimed shots. The bullet, of course, is lethal out to a couple of miles, but hitting things with it at extreme ranges has more to do with luck than gun control.

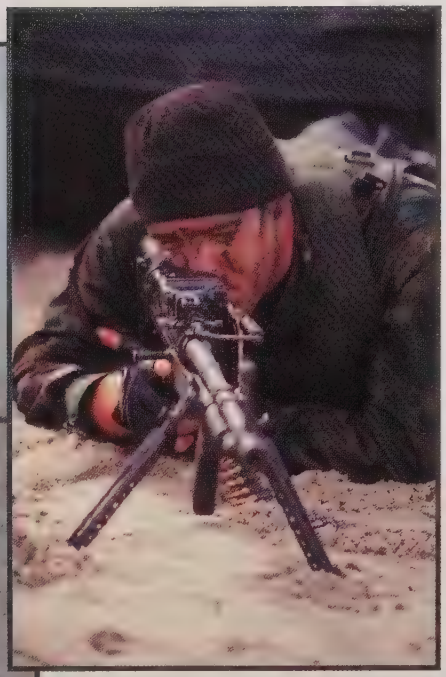
## MP4 and MP5

The M16 and CAR15 are not the only choices for a SEAL rifleman to take on a mission. His weapon can be almost anything that he and the patrol leader think is appropriate. One favorite alternative is the Heckler & Koch (H&K) MP5 "room broom" submachine gun. It fires the diminutive 9mm Parabellum pistol round and is well matched to the laser aim-point sight system for urban combat situations. It is extremely compact—you can wear it under a jacket for those formal events. Like the shotgun, it is accurate and effective only out to fifty meters or so, and its projectiles aren't guaranteed to have the desired effect. But you can carry (and shoot) a lot of those little 9mm rounds; if you squirt a burst of them into a bunker, those inside will probably wish you hadn't.

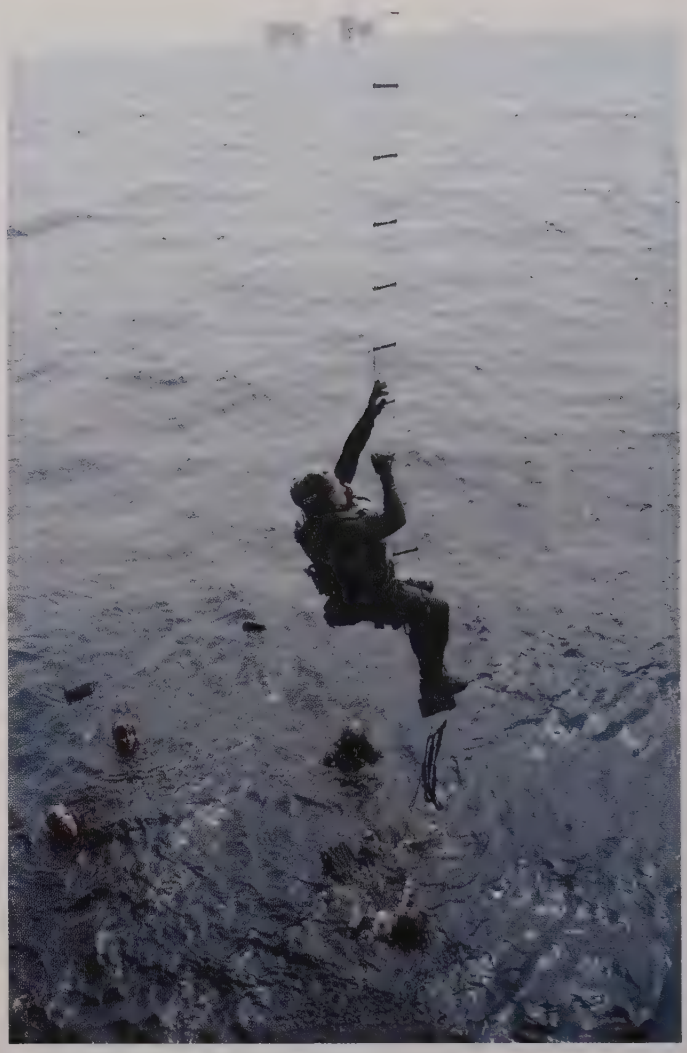
The bigger brother of the MP5 is a beefy submachine gun called the MP4, brought to you by those fine folks at H&K, builders of fine military weapons used around the world. Both of these German weapons possess a quality that, in many ways, is more important than accuracy, hitting power, weight, or rate of fire: when you pull the trigger the gun goes *bang*. This reputation for reliability has sold a lot of H&K weapons to a lot of operators, and it is the reason you'll so often see them, dripping sea water and covered with sand, coming across a beach in the hands of SEALs.

## Silencers

On the muzzles of all these rifles and submachine guns you'll sometimes see tubular devices about eight inches long and an inch and a half in diameter. These are sound suppressers, or silencers as they are sometimes called. For weapons such as the 9mm H&Ks, with subsonic ammunition, they can convert the loud report to a subtle pop by slowing the propellant gasses as



On the occasions when SEALs can be delivered to a beach in more or less dry condition, the squad or element sets up a security perimeter before moving off toward the hinterland. Since SEALs are few in number and have relatively few guns in any fight, they are extremely careful about when, where, and who they intentionally engage.



The caving ladder is a simple tool used by recreational cave explorers. Constructed of thin cable and lightweight aluminum rungs, it rolls into a compact bundle. SEALs find them handy for boarding all sorts of targets whose residents might not want visitors. These swimmers are practicing the techniques required to take down an oil platform, a mission that uses many of the muscles and teamwork skills acquired at BUD/S.

they rush out the muzzle behind the bullet. This can be a very handy feature in those sneaky, close-in fights that SEALs sometimes encounter.

Suppressers work on the M16, too, but not nearly as well. The standard ammunition for the weapon is designed to produce very high velocities, far faster than the speed of sound. Much of the noise from the firing of an M16 comes from the sonic boom produced by the bullet's flight through air. Even so, some of the noise can be reduced, and suppressers are often attached even to M16s, particularly in urban combat situations. As with the aim-point and night sights and so many other tools of the trade, suppressers have their specialized role in the SEALs' bag of tricks.

## M203 Grenade Launcher

One of the most interesting and useful weapons you'll find carried on a SEAL mission is the M203 grenade launcher, a fairly simple weapon with a complex variety of ammunition and uses. It isn't much more than a short length of aluminum tube with a breech block and trigger assembly. It bolts to an M16 rifle, under the barrel; the magazine provides the hand grip. The 203 fires a 40mm cartridge with one of several warheads. It is a bit like a mortar, although it is called a grenade launcher. Its lobbing trajectory allows you to toss projectiles over berms and other forms of cover that your opponent may use to hide from direct fire weapons. Within about two or three hundred meters you should, with training, be able to put one of

the rounds through a doorway or bunker aperture (although it might take a few tries).

Projectiles come in several flavors. There is a high explosive model that is one of the most popular. It will reach out about five hundred meters and will kill or injure anybody within about five meters of impact, a useful device when enemy infantry are closing in on your position. The M203 will also fire illumination rounds, like the mortar, that will light up the battlefield at night, along with tear gas, white phosphorus, and flachette rounds for other times and places.

## M60 Machine Gun

A SEAL squad with an inland patrol mission will carry plenty of "organic" firepower in the form of two stripped down M60 machine guns. The M60 is another old design that has been improved since the years when the dad of today's SEAL carried one back in the "big war." It fires the bigger 7.62mm (.308-caliber) NATO cartridge, delivering accurate, high-volume fire on area targets at ranges well beyond what the M16 can effectively engage.

It is a heavy weapon, with heavy ammunition, often cursed on those long walks in the woods and swamps—until, that is,

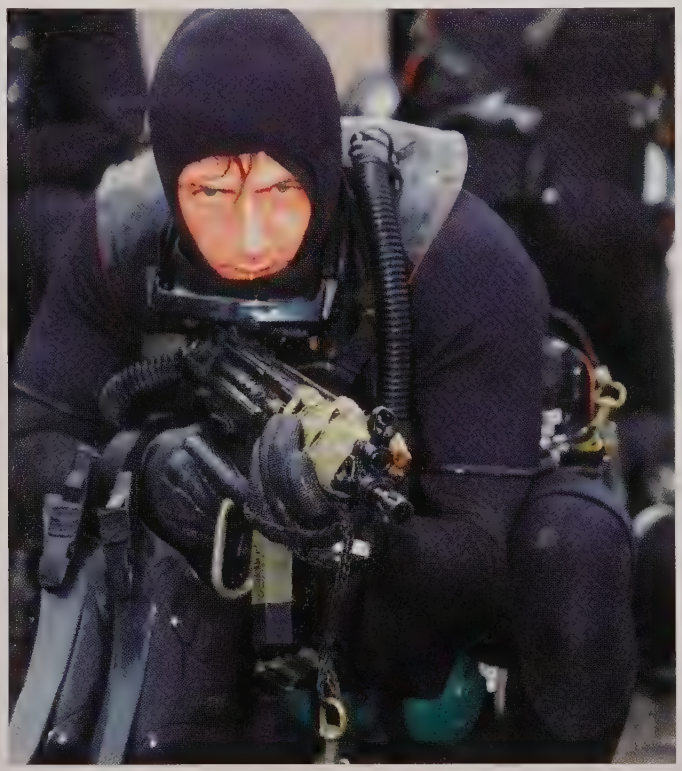
the opposing team materializes out of the woodwork, spoiling for a fight. Then the M60 is worth its weight in gold or blood.

If this seems like a lot of choices, it is. A team commander explains his personal attitude toward weapons used by SEALs:

"I think we really do need a variety of weapons on the teams. Certain operations call for specific capabilities. I also don't think every guy should have a different weapon, just because he has his own personal preference. I should be able to switch magazines with the guy next to me if I run out and he hasn't. But, for the rifleman, the choice can be between the M14, the MP5, or the M16. The MP5 is for use in brush or urban combat situations. The M16 is a good, general, all-around weapon, and you can put the M203 under it. The M14 has extra power for penetration and range.

"Riflemen are for engaging *point* targets and they should be shooting single shots; personally, I don't even believe in three-round bursts. I don't even believe in double-tap [firing two quick shots at a target instead of one], although the idea is currently quite popular. If you put the first shot where you're supposed to, you don't *need* another one! If you need another one, pull the trigger again. Why waste ammunition? You should be calm enough under fire to know what you are doing rather than just opening up full-auto and spraying the riverbank.

"The automatic weapon man is not to take out point targets; he's supposed to keep the enemy's head down and to give you covering fire while the riflemen take care of the point targets."



Above, right, and opposite: Combat swimmers set up a defensive security perimeter as they come ashore, listening for approaching vehicles and watching for beach patrols. The insertion process begins well off shore; the swimmers come to the surface just beyond the surf zone, and then spend long minutes observing the beach and hinterland for any sort of activity. They are essentially invisible here—unless they are expected and a sentry is waiting for their arrival. When it seems safe to proceed, each man slips the heel straps of his fins over his arm where they are out of the way but easily accessible if a hasty exit is required. Once across the beach, the fins will be secured on the swimmer's back using a snap-link.

Combat swimmers always operate in pairs for mutual safety and security. These SEALs are equipped almost exactly as those on the early teams with the exception that they are wearing woodland-pattern BDUs over their wet suits. Both are equipped with the same H&K MP-5 submachinegun that has been so popular with special operations forces for many years.

## RTO

The patrol can be far from a friendly face but still be in contact with the civilized world, thanks to the battery-powered high technology that the RTO (an old expression, short for radio telephone operator) carries. There are any number of systems he can carry, and with some of them you can chat with the big bosses in Washington and in the Pentagon—although that's not usually something the team will think is a good idea.

That's because you're on the ground, with eyes on the target, and the admirals and the assistant secretary of defense sitting next to him are both in a comfortable room in a safe place. When the sun goes down, they will go off for cocktails somewhere, have a nice dinner, and watch TV. You will crawl through the mud and perhaps have people shoot at you, all while attempting to do the bidding of these "experts" with the clean fingernails, thanks to that little "satcom" transceiver carried by the RTO.

Satellite radios are now extremely compact and can easily be taken along on operations with a very moderate weight penalty. They allow the team leader to communicate with almost anybody, almost anywhere (if he can get a channel on the satellite). That, believe it or not, can be a real problem. Although you can call for help from almost anywhere on the globe with these little systems, if some politician in the "puzzle palace" comes up with a wild hair idea, they can call *you* and task you with this death-defying scheme, all from the comfort and safety of Washington, D.C.

The RTO is, in some ways, a pack mule for the patrol leader; he carries the radio and operates it, but under the control of the patrol leader, whom the RTO shadows. The RTO is, along with the officer, a natural target for any sensible sniper on the opposing team who manages to identify and engage the patrol. The radio is the patrol's link to the close air support gunships overhead, the naval gunfire support offshore, and the slicks (unarmed helicopters) ready to swoop in to rescue the patrol in an emergency. By eliminating the RTO and his equipment, the

enemy can isolate the squad and chop it to small pieces. That's why RTOs fold the aerials of their radios down and do their best to look as innocent as possible.

A funny thing about these radios, though, is that—despite their usually excellent reliability and reception—at moments like these they may suddenly stop working. As one officer explains:

"We have better communications now than we used to, but that works both ways. If I need to get ahold of somebody I probably can. It also means that guy can get ahold of me—and give me directions that I might not want. I can remember two times, during 1965 operations in Vietnam, when somebody tried to tell me what to do while I was on the ground. I didn't like it—and in one case I turned off the radio. Now, if the National Command Authority wants to talk to me while I'm on a hot operation, they very well may. This is not necessarily a good thing. To me, the guy on the scene calls the shots. He should receive *nothing* from those guys except support, when he calls up and asks for it. We make a plan and should stick to the plan, unless the guy on the ground wants to do differently. Now, if somebody has some information that can help you, if they see a platoon of enemy, for example, coming down the road toward you, they ought to be able to let you know. But don't tell me to go left or right in reaction to that platoon—let *me* make that decision!

"We have a tendency, because we have such good communications, to let responsibility slip upward where sometimes it doesn't belong. Look what happened at Desert One [the failed Iranian hostage rescue mission]. Jimmy Carter was in the position where he could call up Colonel Beckwith [the on-scene commander] and tell him what to do. I don't like that! Most people in the SEALs don't like that. Some people submit to that. And some people automatically get their hackles up—don't submit to it; put the radio down and say 'Dang, something just went wrong with the radio!' The problem with letting decisions be made someplace, with letting somebody else be responsible, is that I'm still responsible for the people who are with me. I want to make the decision for what happens once we launch the mission. Tell me what to do *before* I leave, and then if I buy off on it, fine. Just don't tell me what to do once I'm out there. While we have the advantage of better communications, we get with that the disadvantage of potential micro-management by people not on the scene."

## Patrol Leader

The patrol leader on a SEAL operation is going to be one of the platoon's two commissioned officers, the platoon leader (normally a lieutenant) or executive officer (lieutenant junior grade or possibly ensign). The role of a combat leader is an odd kind of combination of duties that sometimes conflict. A combat leader has two heavy responsibilities: to complete the mission and to preserve the force. That means that the leader takes himself and his followers to complete a mission that, in war, will probably involve great hazard. How much hazard is sometimes influenced by the officer; it may depend on how much risk he's willing to take in a given time and place. Just how important the mission is he has to judge. He has to judge how much it is worth, in time, effort, ammunition, and the blood of his men. So the patrol leader is stuck in the middle, with a responsibility upward, to his commanders who've tasked him with a mission, and downward, to his followers who trust his judgment.

The officer is part of the platoon, and he is aloof from it. He guards his men, is responsible for their welfare as a parent is for a child—and may send them knowingly to their deaths or dismemberment. He is trained, at Annapolis or Officer Candidate School (OCS), to be careful to avoid playing favorites and developing the natural kind of friendships that are common among civilians—fraternization, it is called.

The officer discovers, early in his career, that while the troops will automatically salute and call him *sir*, the respect may not be sincere. An officer learns that respect is earned in two phases: first through the commissioning process that awards gold bars and officer rank, then all over again in the units where real competence and leadership are demonstrated. For SEALs there is another part, BUD/S, where officers must perform alongside the enlisted sailors, suffer all the same insults and indignities, the same stresses and fatigue. It is an important part of the bonding between the leaders and the followers in the SEALs.

As officer candidates quickly learn at Annapolis, NROTC, or OCS, it's a complicated business to lead men in combat. It is a bit like leading an orchestra; you don't need to be the best player of every instrument, but you have to know perfectly what each can do—then to be able to make sure its resources are integrated into the big score. But the terrible, wonderful thing about military operations is that they are, always and invariably, partially improvisations. There is an old military saying: No plan survives contact with the enemy. That means that no matter how well you think you've prepared, something is going to go wrong. And when it does, one person needs to be responsible for selecting an alternative course of action. That's what officers are for.

The platoon leader will normally have been personally given the mission and then designed the plan, with help from above

Combat swimmers employ a variety of weapons but the Heckler & Koch MP5 9mm submachine gun has been a favorite among SEALs in close-quarters combat for many years. The MP5 has several excellent virtues as a weapon: it is reliable and not likely to jam, it is controllable and easy to keep on target, and it easily mounts a very effective sound suppressor that reduces the sound signature to a quiet pop.

and below. He takes the plan to the field and makes it happen with the help of his SEALs. When the shooting starts he is expected to direct, manage, and control the firing. When the ambush is triggered, he initiates it with a squeeze of the trigger, or the clacker for the Claymore. His M16 magazines may be full of nothing but tracers, which he uses to indicate targets for the rest of the squad to fire on.

On the march, the patrol leader will typically be toward the front of the line. He may take the point sometimes, but usually will be the number two man, where he can provide direction for the man on point and still control the squad in case of contact. The RTO will be right behind the patrol leader, however, wherever he is.

## Tail Gunner

The two most vulnerable areas for the patrol are its front and its back; it will either bump into trouble, or trouble will come sneaking up on it. That's why both the man on point and the last man in line, the tail gunner, have to be especially sharp. The tail gunner will probably have one of the squad's cut-down M60 machine guns—and eyes in the back of his head.

In actual combat, on deep penetration missions, he'll probably carry a variety of goodies to help break contact if the patrol finds itself compromised and on the run. Then he'll pull out the tear gas grenades, the devastating WP (white phosphorous) grenades, and perhaps a Claymore to rig as a booby trap against the pursuers.

Chapter 5

# ACTIONS AT THE OBJECTIVE

Under the dubious glow of an illumination round from an M203 grenade launcher, a SEAL squad assaults an objective during a night training exercise in the desert. Even with NODs (night observation devices), SEALs have to be extremely careful about the conduct of small unit operations because of the danger of "friendly fire" incidents. Training for SEAL missions is sometimes as dangerous as operations on the "two-way rifle range." *Eric Logsdon, U.S. Navy SPECWARCOM*

As mentioned before, SEALs have five different general types of missions to perform: direct action, recon, foreign internal defense, unconventional warfare, and counterterrorist. This is a broad spectrum of responsibilities for a small organization, no matter how well trained or funded. Some of these are primary SEAL missions; others are secondary.

Counterterrorist operations, for example, are really the stock-in-trade for Delta, the army's superb, extremely exclusive counterterrorist unit. The men (and—promise not to tell where you heard this—women) in Delta are going to get the call for such operations except under extreme circumstances. SEALs are trained and prepared to execute the operation, and there are a few "long hair" team members available for extremely covert ops, but it is hardly a prime talent for aquatic warriors.

Likewise, foreign internal defense (FID) and unconventional warfare (UW) are prime army missions that are backed up by SEALs. Both require the language skills and charm of a diplomat, the charisma of an evangelist, and the patience of a saint. The FID mission turns out to be one that a few SEALs excel at, about five guys of the two hundred or so on a team, according to one team commander. This mission occupies a few SEALs in Latin America now, and it kept a lot busy during the workup to Desert Storm in training Saudi and other Arab naval personnel in the Gulf. As one of the team commanders says:

"I think we're quite good at the traditional Green Beret mission of foreign internal defense; we have a very high degree of success when we include foreign military personnel in our operations. For some reason we've thrown that back to the army. We were very good in the Gulf when we took two or three SEALs and used them with ten or twelve host-nation personnel. We 'force-multiplied.' We had all the advantages of the host-nation expertise, plus our skills and experience in executing that type of operation. It was a Cracker Jack setup!"

But it is not one most SEALs find very appealing. It takes many months of study at the Defense Language Institute (DLI) at Monterey, California, to acquire the skill to speak Arabic, for example, or Estonian, and that means time away from the teams. Unconventional warfare is the behind-the-lines version of FID, and hasn't really been used much since World War II—although it is still sitting there as a tasking for the special operations forces.

A pair of SEALs head for a special operations craft-riverine (SOC-R) standing by to assist with the exfiltration honors. The SOC-R is a fairly new addition to the fleet of boats available to support SEAL missions. It is very fast, heavily armed, and can accommodate a full squad and all their gear, weapons, and prisoners. Once everybody's aboard, the guys from the SBSs will spin the boat around, roar down the river at up to forty-three knots, and light up any targets on the shore that offer a threat. *Eric Logsdon, U.S. Navy SPECWARCOM*

So the principal missions, the ones that get the attention, the time, the rehearsals, are recon and strike. The first is stealthy and the second isn't.

## Recons, Deep and Shallow

Despite all the wonderful, expensive technology that has gone into intelligence gathering, with billions of dollars spent on camera systems for aircraft and satellites, there is still no substitute for having someone go ashore for a hands-on, eyes-on study of a potential target. One of the lessons learned from Urgent Fury was that overhead intel only begins to provide essential planning information and that things like landing zones can look completely different to a helicopter pilot than to a high-flying aircraft—with potentially catastrophic results.

Although not as glamorous as the strike missions, recon ops are just as important now as ever. SEALs still get tasked with these jobs, and it is their particular art form.

The recon mission can be just about anything, anywhere. The classic one, of course, is the beach recon preceding an amphibious operation. While the Marines think their own recon guys can do this better than anybody, SEALs politely disagree. While it doesn't get much attention, it is still a tremendously important mission when you consider how much investment the United States has in putting marines across the beach anywhere in the world. The memory of Tarawa half a century ago haunts the marines—and the navy too. Beach recons, consequently, are a big part of the course of instruction at BUD/S, where they're called hydrographic surveys. They can be as simple or as detailed as you and your commanders want—and as circumstances permit.

There are many different types of hydrographic surveys and beach recons, from simple to complex. The amphibious task force commander who is planning an across-the-beach op will want to know gradient and composition of the beach, littoral

Here and overleaf: A SEAL squad leader and his RTO are an inseparable pair on the battlefield. The radio telephone operator, or RTO, is the team's communication link to fire support from aircraft or tube artillery as well as to the helicopters that will come in to extract the team when the time comes. The team has popped a violet M18 smoke grenade as a recognition signal to the inbound helicopters. These colored grenades are carried by all members of the team and are used for signaling. Some high-concentration white smoke grenades are also sometimes used as an obscurant to screen the squad's movements from enemy eyes.

current across the beach, surf size and type, beach exits, defenses, and obstacles underwater.

It takes a lot of people—or a lot of time—to develop this information. Without getting into the technical details, here's how they do it:

Swim pairs are dropped in the water off the beach at intervals of about twenty-five meters, on line, by a high-speed boat—just like they did fifty years ago out in the Pacific. Under command of the officer in charge (OIC), the swimmers move in toward the beach, making soundings with a lead-line (a lead sinker on a line marked in one-foot increments). While one man measures the depth, the other records the data on a slate. Since all the swimmers make these soundings at the same time, a set of coordinated data is assembled across a wide frontage of possible landing zone.

The line of swimmers moves in to the beach together, with the OIC controlling the intervals between soundings. Both depth and composition are recorded on each swim-pair's slate. The marine task force commander's staff will want to know what they have to contend with. Coral reef? Mud? Jagged rocks? Man-made obstacles with antitank mines attached? Is the foreshore (the surf zone) too shallow for LSTs, or is it steep and suitable for ramped vessels? Is the surf high and violent or short

An M60 gunner lets loose with a burst; the photograph shows a tracer round leaving the muzzle. Every fifth round in standard belts of machine gun ammo has a small quantity of red phosphorus in the base of the bullet. This material burns for about one second, long enough for the projectile to travel approximately nine hundred meters, or half a mile, and vividly indicates to the gunner the point of impact of his fires.

and mild? Is the current across the beach strong and likely to force the AAMTRACs away from their intended beaches? Then, what's beyond the beach—will tanks and armored vehicles be channeled by sea walls, cliffs, embankments? Are there enemy-prepared fighting positions dominating the beach? Are they manned? Is there a beach patrol? Are there mines?

The survey party moves all the way into the beach and perhaps beyond, then withdraws back to the water. Under the direction of the OIC, they reform a line offshore for pickup. Then, perhaps aboard the flagship for the amphibious task force or wherever the SEAL unit has set up shop, the data from each swim pair is assembled as a detailed chart and presented to the plans-and-operations guys who are trying to figure out what to do. They (through their recommendation to the task force commander) make the call on the amphibious operation, not the SEALs, using the data provided.

There is another kind of recon for which the army and navy SOF communities compete, called *deep recon* or *strategic recon*, and this one might not involve even getting wet. Deep recon involves the study of a target or area of interest that typically requires covert travel overland or covert insertion inland. SOF teams did this during Desert Shield/Desert Storm in Kuwait and Iraq, watching for enemy SCUD launchers, for example, and reporting their location for attack by other "theater assets" like U.S. Air Force F-15E Strike Eagle aircraft. A SEAL recon team was on the Saudi/Kuwait border when the Iraqis attacked the town of Kafji and participated in the coordinated engagement of the enemy armored column by air and coalition ground units.

## HAHO and HALO Insertion

These recon teams can be delivered in some quite exotic ways. One of the sneakiest is by parachute, but SOF teams don't consider the standard 500- or 1,200-foot drop altitude used for mass tactical airborne operations to be very covert; having a C-130 fly low over the neighborhood is one sure way to get noticed. Instead, the drop aircraft goes way up to 30,000 feet or

SEAL squads are sometimes said to be eight men wearing twelve uniforms, and there is certainly a lot of personal choice visible when units are in training for deployment. Each man is permitted great latitude in his choice of load-bearing vest, gloves, headgear, and related battle rattle.

so—where the commercial airliners fly. The jumpers, rigged with special equipment to cope with the incredible cold and the lack of oxygen at that altitude, jump and free fall before deploying their canopies.

The high-altitude exit/high-altitude opening (HAHO) technique allows a jumper to glide for many miles under his canopy, through the dark, virtually without fear of detection, to a predetermined landing zone.

The high-altitude exit/low-opening (HALO) technique is a similar way to have the jumper move away from the ground track of the aircraft, making it difficult to find him. This time, though, the jumper uses free-fall parachuting techniques to fly through the air, opening his canopy only when very close to the ground.

Once down, the mission proceeds as planned. When it is over, one way or another, it is time to go home. While, again, there are many ways to do this, the quickest will again be by aircraft. Unfortunately, though, pickup aircraft are a lot less subtle.

## STABO Extraction

An extremely unsubtle extraction technique, stabilized tactical airborne body operations (STABO) involves having a helicopter arrive over the team on the ground with a special harness deployed, coming to a hover, and then plucking the SEALs out of harm's way. The SEALs all wear harnesses similar to those used for parachuting and attach the harnesses to the sling dangling from the helicopter. When all are secured, it's up, up, and away . . . for a very breezy ride.

## Strike

The mission against the Panamanian patrol boat was a classic strike or direct-action mission, a carefully planned, precision attack against a point target under difficult circumstances. Using any special ops unit for such an attack is a lot more expensive, in every respect, than using conventional resources to do the

While it has become somewhat fashionable in some communities to wear ball caps with the bill reversed, this SEAL has a very practical reason for wearing his hat this way: it keeps hot cartridge cases from dropping down the back of his neck, and even SEALs don't enjoy being burned that way.

same kind of thing, so there is usually a good reason for sending SEALs to blow the propellers off a boat instead of (for example) having an F/A-18 drop a bomb or smart missile on the target. Collateral damage and loss of life has been one of the driving concerns lately; in Panama, certainly, and in Grenada, too, this caution has created risks of its own.

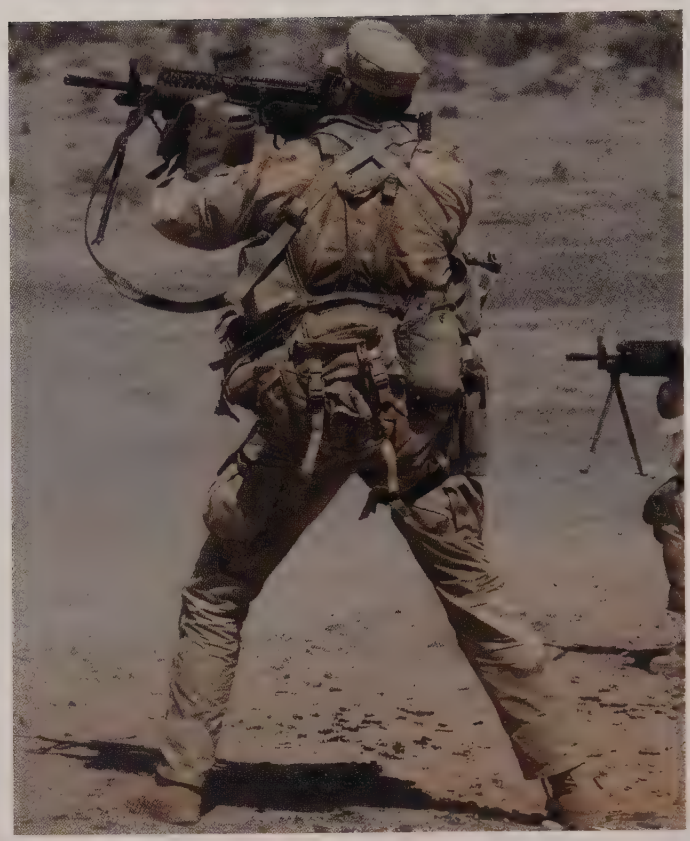
But ambushes and attacks on point targets are still a major talent of SEALs, another area where they compete with the army's rangers and special forces. These can be conducted in many imaginative ways, most of which are of the high-risk, high-payoff variety (although SEALs sometimes think some of these are high-risk, low-payoff missions).

## Ambushes

The ambush is a kind of classic special op mission. SEALs conducted probably thousands of them in Vietnam—and were on the receiving end of quite a few too. The "plain vanilla" version of the operation works like this: first, find a place where your enemy regularly travels—a road or trail—and find a nice sharp bend in the route. The kill zone will be determined by the patrol leader, normally the long axis of what is an L-shaped portion of the road. The leader will position himself at the corner and will control the whole thing, usually with his own fire and with the triggering of a Claymore mine or two.

Ambushes are marvelously effective when everything works properly—the carnage is *incredible*. But if you screw one up, the carnage can be on your end. And ambushes are easy to screw up; the key is fire discipline and timing. Ambushes don't take a lot of people or a lot of resources (depending on the target, of course), but they do take planning and teamwork.

If available, Claymores are installed along the kill zone with overlapping fields of fire and with careful attention to



During their workup for a combat deployment, a SEAL platoon's members will spend many weeks training with all the unit's authorized weapons, and in the process, each man will expend many thousands of rounds of ammunition. They will conduct drills that come close to simulating some of the conditions of combat—targets appear unexpectedly, stoppages are simulated, shooters have to fire and maneuver quickly. They are firing the M48 medium machine gun here.

protecting the team from the substantial back-blast. If the ambush is along a road, detonation cord can be placed in the ditches that survivors will naturally use for cover after the Claymores fire, and they can be taken out with another squeeze on another clacker, firing the electric blasting cap that will fire the det cord.

When all the preparations are made, the responsibilities and fields of fire assigned, you and the rest of the crew slither into the woodwork without a trace and wait . . . and wait . . . and wait some more. At last, in the distance, somebody is moving toward you; it can be children on their way to school, innocent civilians going to market. You have to sit, silently, waiting for them to pass. What if one of the kids sees the Claymore? What if somebody notices your face peeping out of the brush? Anything that can go wrong, will go wrong to somebody, sooner or later—usually sooner—so it pays to set these things up with exquisite attention to detail.

The way these things are *supposed* to work, an enemy unit will come rolling down the road. With luck (for you, anyway) they will fit the ambush resources; don't pop a Claymore against a platoon of main battle tanks, for example. But if any enemy squad comes bopping down the bunny trail (laughing, playing radios the way they sometimes do), everybody in the ambush waits for the signal to fire. That signal is usually the patrol leader's detonation of the Claymores, hurling their pellets in wide, deadly arcs. If the timing is right and the patrol is within the kill zone, they will all go down—maybe. Some guys are just luckier than others, and fit into a hole in the pattern of the spray of ball bearings. Others may be outside the kill zone. Regardless, this is the time to use all those marksmanship skills they taught you at BUD/S and since. You engage the closest guy with a gun in your field of fire (got a round in the chamber? safety off?), and you keep engaging until there is no more resistance or the patrol leader calls, "Cease fire!" There will be a terrible mess where the patrol was, and this will be a good time to start moving toward the exits.

Ambushes go wrong in lots of ways. Often, the enemy doesn't cooperate. They either won't show up, or they send the wrong victims (like tanks), or they decide not to use the road today, but move along in the woods—where you're hiding. Or they notice you before they get to the kill zone, and then it's *turnabout is fair play*. Then it's your turn to be the victim—and practice those escape-and-evasion skills they taught you in BUD/S. Just remember what they told you at BUD/S: The only easy day was yesterday.

## Raids

Raids are quick-in, quick-out strikes against high-value targets that can't be attacked efficiently or effectively otherwise. This is another area where SEALs compete with the army, whose rangers are masters of the art of the raid. Rangers, however, are specialists in the "blunt instrument" style of raid, with lots of people (very large, muscular ones) and lots of firepower landing on top of an enemy target, typically by parachute, and ripping it to shreds.

The SEAL raid is more surgical and subtle. It still might arrive by parachute, but—unlike with our beloved rangers—the enemy target of a SEAL op might never know what hit them. That's because a SEAL strike mission might only involve two men, a sniper and his spotter/security man. With their big .50-caliber sniper rifle and woodcraft skills, these two can move across terrain unseen and disappear into the woodwork. (Rangers attempting this would leave a trail of scorched earth and destruction visible at a mile.) Then the sniper team can sit and wait until the SCUDs come home—and then drill holes in their rocket motors from a mile and a half, without anybody knowing where the bullets came from or how it happened. That same sniper team can, if desired, kill a senior enemy staff officer or commander riding in his Mercedes, pick off a tank commander standing in his hatch, or disable an aircraft taxiing for take-off.

Among the most challenging kind of raid SEALs train for is the counterterrorist hostage rescue mission. This is the kind of op that you only get one shot at; it has to be done perfectly or the wrong folks get killed. Consequently SEALs practice all the ancient arts of rapid insertion, extraction, close-quarters target identification, and precision shooting. According to people who've been there, you've got seven seconds in a room with the bad guys to conduct business—sort out the good from the bad, kill the bad guys, protect the good guys—or the operation goes to hell. When you consider that this must often be done at night, in unfamiliar territory, with alert and fanatic enemies, this becomes a tall order. But it can be done, and has, successfully.

## Killing People and Destroying Things

A sad but unavoidable consequence of all military missions involves taking perfectly good buildings, airplanes, vehicles, bridges, boats, and people, then taking them apart and converting them into smaller, less useful junk. This process is generally thought to help accomplish national policy objectives. While this behavior isn't always considered very nice, it usually works. This is conflict resolution, U.S. Navy SEALs style.

There are many ways SEALs accomplish their missions, but basically there are only two fundamental techniques used by the teams. One of these uses individual weapons—rifles, machine guns, mortars—to engage other hostile forces. The other involves using explosives in one form or another to blow things up. "Hostile forces" is a military expression for the loyal soldiers or sailors opposing the SEAL mission, and "engage" is a military expression for the business of shooting up these folks in an organized way. If this seems like kindergarten, it is only because we generally talk around the seamier side of the business of war.

SEAL missions often involve the destruction of some enemy facility—a radio transmitter, a bridge, a bunker complex, a headquarters, or (as in the attack on the *Presidente Porras* in the beginning of this book) a naval vessel. This usually involves the use of high explosives in one of many forms, and one thing most SEALs quickly discover in BUD/S is that explosives are *fun*. As one blaster says with a smirk, "There are very few of life's troubles that can't be cured with high explosives."

## A Short Course in Demolitions and High Explosives

Despite what you hear, high explosives are quite safe to handle and are actually difficult to detonate. Most of the military varieties can be pounded with a hammer (old, runny dynamite excepted) without going off. One of the best materials for blasting passages through coral reefs is a simple mixture of fertilizer and diesel fuel. You can break off a chunk of TNT from a quarter-pound block and set fire to it; so it's not only a great explosive, it's also a great heat source for warming up your lunch. C4, the famous "plastic explosive," looks, feels, and acts like putty—a white material that you can easily form and shape with your fingers, in complete safety. The same is true of virtually all other military explosives, with the possible exception of dynamite, a combination of nitroglycerine and gun-cotton that can become quite unstable if stored improperly. Most of these materials can sit on the shelf for decades without any significant decay, and it isn't unusual to be issued cratering charges, for example, that were made during World War II.

For these and other reasons, explosives are very interesting and useful materials, available in many forms. There is Primacord, or det cord, a material that looks like fuse, a flexible plastic-like quarter-inch cord that contains a very high explosive, PETN, and is used to connect main charges. The PETN cord is set off with a blasting cap or other charge—then it explodes at a linear rate of about four miles per second with enough force to detonate any U.S. military explosive the cord is tied to. It is very handy stuff for making a lot of little charges all go off at the same time—and other, sneakier applications discussed later.

In every case, including that of dynamite, you must work hard and carefully to actually get the stuff to go off. And that's accomplished with a little device that is quite dangerous and that will go off if you fail to handle it with care, caution, and respect—the blasting cap. These come in two flavors: electric and fused. Both are tubes of aluminum or copper, a quarter of an inch in diameter, partially filled with a three-stage mixture of specialized explosives, an ignition charge, a priming charge, and a base charge. Although things happen quickly, these charges go off in sequence, and the last one, the base charge, is the one that *should* set off the main charge.

As an example, let's set off a one-pound block of TNT. The main charge comes in a cardboard tube with a threaded receptacle on the ends to hold the blasting cap. We'll use common fuse instead of an electrical cap for this charge; it's more traditional—also less safe.

First we take the fuse, cut six inches off the end and discard it. This should remove any contaminated and unreliable material. Then we cut a section six feet long, light one end, and time the delay. After about four minutes, a little flash of fire will come from the end. Note the time (in seconds), divide by six, and you know what the delay of the fuse is in seconds per foot; normally it is about forty seconds per foot. Now, using your combination tool designed for demolitions work, cut a good, healthy length of fuse sufficient for five minutes of delay. The ends should be clean, square cuts.

Remove a blasting cap from the storage box where they are kept for safety and inspect the fuse well for foreign matter. *Gently* slip the fuse into the open end—about an inch—and into contact with the ignition charge. Crimp the fuse to the cap with the crimper part of the tool, about a quarter inch from the end of the cap. Now gently insert the cap into the priming well of the TNT block, place it on the ground, and extend the fuse so that it doesn't coil over on itself. We could use a fuse-lighter to get things started, but you might as well learn the traditional way first: split the fuse end about half an inch, insert a match head in the core, and strike it. The match will ignite the black powder inside, a bit of flame will sputter, a little smoke will be emitted, and it is time to vacate the premises. It is considered good manners to shout, "Fire in the hole!" at this point unless there are bad guys in the vicinity. You walk, not run, well away, take cover, note the time, and await developments.

It's amazing what you can do to trick out the basic M4 carbine variant of the venerable M16 rifle. SEALs always have a PEQ-4 laser pointer/illuminator on their weapons. Also installed will be an optical sight and probably an M203 40mm grenade launcher, all attached to the weapon on a so-called Picatinny rail system. The standard collapsible stock has also been replaced by an upgraded version, and it is also now common for SEALs to use painted camouflage on their weapons.

Two members of a SEAL squad chat before being sent down a path in the underbrush to engage targets and avoid booby-traps.

When the fuse burns down inside a non-electric blasting cap, a little squirt of flame shoots out, into the cap. If everything works as planned, the ignition charge goes off, then the priming charge, which detonates the base charge of the cap, and that little blast will usually set off the TNT. There will be a loud *Boom!*, and dust and rocks will scatter for a hundred meters in all directions. But don't expect any gaping crater—even a pound of TNT won't do much unless it is artfully placed and prepared. Instead, we have a patch of ground that is lightly depressed and not much more.

Explosives are used to do very specific things and are used with mathematical precision. You can cut a twelve-inch-diameter tree with a half-pound block and have it fall across a roadway, blocking traffic. You can make a ribbon out of C4 plastic explosive, stick it to a steel girder, and cut a bridge support. You can shape it into a flat diamond and wrap it around an eighteen-inch-diameter ship's propeller shaft, prime both points with blasting caps, and cut off the shaft neatly when the charge goes off. Put two identical charges on both sides of a concrete wall or abutment and prime electrically so both go off at the same instant, and a small amount of explosive (a pound and a half per foot of thickness) will crumble the concrete.

The most common application of explosives for SEALs has been clearing beach obstacles prior to amphibious landings, a technique developed to a minor art form by the UDT swimmers during World War II and Korea. Besides that use, vast quantities of C4 went up in smoke in Vietnam and, more recently, in the Gulf, blowing up bunkers and creating diversions. You can make a foxhole in a hurry with it, crater a road, cut a railroad line or a thick telephone cable. In the form of a Bangalore torpedo (a long section of steel pipe filled with explosive) you can blast a gap through a barbed wire obstacle or a minefield. It is mighty handy stuff.

Det cord, all by itself, has an interesting application for those occasional ambushes where you have plenty of time to set up shop. It can be electrically primed and hidden in roadside ditches alongside the kill zone. When the ambush is initiated, you can be reasonably certain that the survivors of the first blast of small arms fire will dive for the presumed protection of the handy ditch. If the SEAL with the "hell box" (as the blasting machine is called) remembers to twist the handle about now, the "det" cord will explode in the ditch, adding to the consternation and woe of the enemy force.

## Claymore Mines

The Claymore mine was developed in Vietnam to deal with those nasty situations when a couple of hundred little fellers in black pajamas were swarming across the barbed wire defenses of a compound with intentions of committing mayhem on the residents. The Claymore is a simple little package of C4 explosive and a few hundred steel ball bearings, fired with an electric blasting cap and a "clacker" (a one-handed electric generator that, when squeezed, will fire the cap). When the explosive detonates, the ball bearings spray a wide area with deadly effect, usually helping to convince the enemy force that there may be other, better, things to do than to attack this particular place.

Claymores have since become favorites for temporary defensive fighting positions and for ambushes, where they excel. Like virtually all other weapons, they are not perfect or foolproof. One sneaky trick the VC learned was to find them and turn them around.

The guy with the clacker in an ambush setup has to be a very cool dude, sufficiently self-disciplined to wait until the enemy is properly within the kill zone before firing the weapon. Lots of perfectly good ambushes have been ruined by the premature

Here and overleaf: This squad is conducting GOPLATS take-down drills by fast-rope insertion from an SH-60 Sea Hawk helicopter. Oil platforms typically have helipads so this ought to be a simple procedure, but gas and oil platforms in the Persian Gulf have sometimes been heavily fortified against such assaults. Even without such precautions, these platforms are inherently dangerous places, loaded with hot, high-pressure, explosive gasses and liquids. They are also noisy, and have oil-coated decks that make footing uncertain. Real-world GOPLATS take-downs are conducted at night.

detonation of the Claymore, removing the element of surprise quickly and completely.

SEALs carry a Claymore or two along on some of their excursions, the whole kit of mine, clacker, wire, and blasting cap all stored neatly in a little bundle complete with carrying strap.

## .50-Caliber Sniper Rifle

One fine, somewhat neglected military art is that of the sniper. SEALs and Green Berets study this skill at the target interdiction course, part of the Special Operations Command Center and School at the Fort Bragg, North Carolina. Here, out among the weeds and chiggers, apprentice SEAL snipers learn how to move invisibly across any terrain, to build a hide so natural that an enemy can stand on top of it and not know that two navy SEALs are in residence below, and to shoot so well that enemy soldiers over a half mile away die with the first shot, tank commanders standing in the turrets of their tanks lose their heads (literally), and antennas and vision ports on armored vehicles become useless.

The key to all this is a relatively simple, relatively ancient weapon—the rifle. The one favored by special operators like the SEALs these days is the big .50-caliber single-shot, bolt-action model that weighs about twenty pounds with scope and bipod. For a variety of reasons the big half-inch bullet will fly very accurately, very far. It will reliably strike a man-sized target so far away that the noise from its firing is practically inaudible, out to ranges of two kilometers, more than a mile and a half. But to achieve such accuracy requires far more than just an accurate

weapon and sights. A SEAL sniper team out in the bush must deal with wind, moving targets, slant angles, and heat distortion.

Snipers work as two-man teams: the shooter and the spotter. They are inserted near their objective by boat or parachute, or swim ashore from a submarine, or come by Volkswagen bus—whatever works for the tactical situation. They will travel the last kilometer or so to their hide by crawling. It can take a day or more. Their weapons and equipment are contained in a "drag bag," pulled along behind each. Under cover of darkness, they carefully, methodically carve a hole in the ground, then re-cover it so artfully that it seems perfectly undisturbed. In this hole the pair will live for a day or two, observing, recording, and possibly reporting by radio. Normally the sniper's mission will not include actually firing on an enemy force but calling in artillery or aviation to do the job.

Determining range to the target and wind effect are the two principal problems confronting the sniper team, and the pair will expend considerable effort preparing to fire the first shot. A big .50-caliber round is inserted into the breech, the bolt brought forward, locked, and the sights carefully aligned on a computed aim point.

The spotter uses a compact telescope to look downrange. Instead of watching the target, the spotter watches for the *bullet* as it streaks toward the victim. With proper training and the right weather conditions, you can actually see a bullet and the vapor trail produced as it flies through the atmosphere. The spotter reports the point of impact to the shooter for any corrections.

Chapter 6

# SPECIAL BOAT SQUADRONS—THE BROWN WATER NAVY

The 11-meter RIB is one of the essential items in the inventory of a SEAL team conducting operations in a maritime environment today. Several versions are used but the 11-meter model will carry a complete squad of eight men and their gear at high speed and relative safety. The hull is a type of fiberglass and offers stiffness and strength. The buoyancy tubes make the RIB unsinkable in any sea state and allow tight turns at speed. A crew of three SBS members is assigned to RIBs. The boats are equipped with radar, radios, M2HB machine guns, and Mk19 grenade launchers. The larger of these RIBs is good for better than thirty-five knots/40 miles per hour and has a rated range of two hundred nautical miles. That means a squad can launch from a ship well over the horizon and zoom across the waves to take down an oil platform or other target with a minimal chance of detection.
*Eric Logsdon, U.S. Navy SPECWARCOM*

As mentioned earlier, the SBSs have typically been somewhat neglected in favor of the higher profile SEAL teams in the development of NSW. That's too bad because the boats have as rich a combat history as the teams, and both have worked closely together for nearly three decades. In fact, one of the big selling points for NSW in the competitive business of special operations is the unique resource SPECWARCOM has in its fleet of boats designed to take the fight close to the beach and up all those lazy rivers.

The SBSs are teamed with the SEALs to provide a kind of mutual support. And, just as the SEALs have a variety of weapons to choose from for their missions, the SBS crews have a menu of boats as well. There are little IBS inflatables, RIBs, PBRs, and fast-attack patrol boats. Most are stunningly fast, with thirty-knot-plus speeds—although you only get speeds like that from an IBS (a little seven-man rubber duck) when all the BUD/S are screaming and the students are paddling like crazy.

Mission mobility for NSW provides an extremely diverse set of problems for the "Coronado Yacht Club." The three basic areas of responsibility for the SBS part of NSW are coastal patrol and interdiction, special operations mission support, and riverine patrol and interdiction. But don't think that there's a sharp line between any of these assignments—the real world has a way of mixing and matching them. The boat that is primarily intended for coastal patrol may find itself occasionally on a riverine mission, or executing some exotic special operations support assignment.

Specifically intended for river operations, the SOC-R is crewed by four men from the SBS and provides express taxi service for six SEALs and their combat equipment. Twin diesel engines drive Jacuzzi pumps that propel the boat at speeds up to about thirty-five knots/forty miles per hour. The SOC-R is based on extensive battle experience in the Mekong Delta during the war in Vietnam and Southeast Asia. One of those lessons is that it pays to go in heavily armed and armored, so the boats have M2HB .50-caliber machine guns and Mk19s, as well as ceramic armor kits for the vital areas of the vessel.

*Eric Logsdon, U.S. Navy SPECWARCOM*

Are we having fun yet? Even on small rivers and crowded estuaries in the middle of the night, the SOC-R's crew can jam along at high speed and relative safety thanks to the boat's shallow draft, excellent radar, and tremendous agility. The SEAL passengers ride in comparative comfort without the pounding that comes with high-speed offshore missions. *Eric Logsdon, U.S. Navy SPECWARCOM*

## Coastal Patrol and Interdiction

The first of these, requiring the biggest vessels, is the coastal patrol mission. The offshore patrol and interdiction mission is very different than, say, the clandestine insertion of a couple of combat swimmers for a demolition raid. It takes a good-sized vessel to provide the kind of platform needed to stay offshore for very long, to provide reasonable comfort for the crew, and to have the speed and firepower to accomplish anything useful. These missions are currently assigned to the patrol boat, coastal (PBC), Mk III swift patrol boat, and the Mk IV patrol boat.

Neither the PBR or PBL (patrol boat, light) provide much speed or comfort out past the surf zone; they're flat water boats with a specific set of missions. For the offshore jobs, where the Sea State goes up to five or so and the waves swell up to twelve feet, even froggy SEALs want something sturdy and stable. That pretty well eliminates the light little flat-bottomed boats in favor of something longer and beamier, with a nice, sharp V-hull to slide through the waves instead of pound along on top of them.

## Patrol Boat, Coastal

The PBC is something of a major change for the NSW community—the introduction of an entirely new class of ship to support NAVSPECWARCOM missions. In the past such support has been improvised, based on whatever happens to be around. The PC-1 class formalizes the support.

Ships of this class, starting with the *Cyclone* (PC-1), are designed for serious patrol work, their primary mission. NSW support is secondary, but a dedicated assignment. With an overall length of 170 feet, the PBCs are big enough for serious offshore work, reasonably comfortable, and commodious enough for a rather large number of embarked SEALs and NSW players.

The ships are the biggest platform the SBSs have ever had. They're funded by SOCOM and are assigned to the NSW groups at Coronado and Little River, but are likely to be forward based. There will be a total of thirteen of the PBCs when the program is complete.

A SEAL relaxes before his CRRC gets underway.

Obviously, it is hard to be very covert with 170 feet of warship. Rather than sneaking and peeking like the little boats, the PBCs will be used to "show the flag" while maintaining a U.S. presence in regions where the national command authority wants a show of force. The ships will be tasked with monitoring and detection missions, escort operations, noncombatant evacuation, and foreign internal defense—all pretty much the plain-vanilla patrol mission assigned to any of the navy's or coast guard's smaller ships.

The more interesting missions, and the ones the NSW community is involved in, are for long-range insertion and extraction of SEAL teams, tactical-swimmer operations, intelligence collection, operational deception, and coastal or riverine support.

The PBC's steel hull with aluminum superstructure has a beam of twenty-five feet and a draft of about eight feet; it displaces about 330 tons (full load). Propulsion comes from twin diesels that can drive the ship at thirty-five knots. A tank of fuel (about thirteen thousand gallons) will give a range of about two thousand nautical miles at a moderate cruise speed of twelve knots. The ship will tolerate Sea State 5 conditions—rough sea with waves of eight to twelve feet. There is a platform on the stern for launching and recovering combat swimmers and the ships each have two CRRCs available for SEAL operations.

Normal complement is four officers and twenty-four enlisted personnel. Unlike previous SBS vessels, the commander of the PBC ships is not likely to be a SEAL but a surface warfare officer. While there is some apprehension about this, there is also the realization that this is an entirely new asset for the community, with a somewhat different mission; and how it all works out remains to be seen. There will probably be at least a few SEALs assigned. Besides the crew, there is berthing for a nine-man SOF or law-enforcement detachment aboard.

Appropriate to its size and missions, the PCs will be the most heavily armed of NSW craft. A Mk 38 25mm rapid-fire gun is installed, along with a station for the Stinger antiaircraft missile system. Four mounts for heavy automatic weapons are available for the Mk 19 40mm grenade launcher, the M2 .50-caliber machine gun, and the M60 7.62mm machine gun. For antiship missile defense, a Mk 52 chaff/decoy system is installed.

## Mk III Swift Patrol Boat

The Mk III is a big, sixty-five-foot boat designed back in the 1960s with a coastal mission in mind. These boats have been used extensively in combat over the years, particularly to patrol the waters off the coast of Vietnam and, more recently, the Latin American coastal waters used by drug traffickers and the Persian Gulf waters in support of Desert Storm. The basic mission is to serve as a high-speed weapons platform for NSW units. The deck is reinforced to tolerate recoil stresses from the many weapons that can be mounted on the Mk III—any mix of 20mm cannon, 81mm or 60mm mortar, Mk 19 40mm grenade launcher, .50-caliber machine gun, and the faithful old M60 7.62mm machine gun.

The boat is rated at thirty-plus knots, needs a crew of eleven, and can stay out up to five days. It is powered by three big diesel engines installed in an all-aluminum hull with a low-profile radar and acoustic signature (for this kind of boat, anyway) that makes it comparatively easy to accomplish some kinds of covert missions. The navy will tell you officially that it is "reasonably" stable in "moderately" heavy seas, but most experienced offshore operators will tell you that a sixty-five-foot hull fits neatly in the troughs of most any sea and will wallow like a pig in mud given half an opportunity.

But NSW boats aren't intended to be pleasure craft. The Mk III is tasked with patrol and interdiction missions, with fire-support missions against targets ashore or afloat, and the insertion of SEAL team elements. One of their users, an SBS unit commander, says of them, "They've lasted through everything we've sent them to, from Vietnam to the Persian Gulf—and in fact the Persian Gulf is where they've gotten their heaviest workout." The Mk III is an old boat now, nearing retirement. An improved model, the Mk IV, is in service, but a completely new version, to be called the Mk V, is in the long design and acquisition process.

## Mk IV Patrol Boat

The Sea Spectre sixty-eight-foot patrol boat is an improved version of the Mk III, an evolution of a proven design with some substantial upgrades. The missions, specifications, and weapons remain about the same, but the boat is designed to be more easily adaptable to the wide variety of missions that such boats are tasked for. Like its older brother, it is not a heavy weather offshore boat (that doesn't mean you don't have to operate in those conditions, just that you'll be uncomfortable when you do).

## Special Operations Support Mission

Support for special operations doesn't have the same kind of requirements for station time that patrol does, and the boats used for inserting and supporting SEALs and other SOC

Here and overleaf: Although SEALs and SBSs use inflatable boats from many manufacturers and models, the classic for many years has been Zodiac's little F-470, a French import that is popular with all U.S. SOF. It's only about 15.5 feet long but is stable and fast when not heavily loaded. It is one of the few boats that can be launched from a submerged submarine for very covert insertions. It is an over-the-horizon insertion platform but no longer the first choice for such missions because of the F-470s limited payload and sea-keeping qualities. But it is the only boat in the inventory that can be brought ashore, deflated, and buried while the SEALs are busy with their mission. Unlike the RIBs, the F-470 may be propelled by an engine or paddles, the latter for a virtually silent approach to a hostile shore. A whole squad of eight men can be carried, but that's really pushing the capacity of the boat.

operators are designed with things other than comfort in mind: speed, range, capacity, and a low radar signature are far more important than stability or fuel economy.

And the SBS crews and boats aren't always supporting strictly SEALs or NSW personnel; part of the idea of the joint SOF when it was established was to coordinate and integrate all the operators going downrange. So these SBS and NSW assets give rides to Green Berets and Rangers as well as to SEALs, and even to the occasional Force Recon Marine.

## Rigid Inflatable Boats

Rigid inflatable boats (RIBs) are the boat of the hour. Everybody's making and using them. Pretty soon you'll probably be able to take a Caribbean cruise on one. They're simple, cheap, fairly economical, and faster than a speeding bullet. They are used by the navy, the coast guard, and many foreign nations. They combine some of the best features of rigid hull and inflatable designs in one fast, stable, buoyant platform.

There are three variants of the big rubber duck used by the SEALs: twenty-four-foot, thirty-foot, and ten-meter RIBs. All use fiberglass hulls with a V-shaped cross section, offering stability, a rigid motor mount, and firm footing, along with an inflatable gunwale section. The inflatable part of the boat is fabricated from an extremely tough material, a combination of hypalon neoprene and nylon reinforced fabric. It won't shed bullets, but it will take a lot of lesser abuse, including the pounding you get from jamming

around offshore, punching through the waves. The hammering a boat takes in normal service can be pretty severe, cracking fiberglass and aluminum hulls with the constant flexing. That is not a problem with an inflatable.

The RIBs are extremely tolerant, for a small boat, of heavy seas. With light loads the boats have operated offshore in extreme conditions—the Sea State 6 and winds of forty-five knots. That means waves up to twenty feet high, when even SEALs would rather be ashore, even at BUD/S. While the boats can operate in such conditions, they normally don't go out when things get that bad; the SOP calls for a Sea State 5/thirty-four-knot wind limit on use. All the boats are normally crewed by three SBS sailors.

The twenty-four-foot RIB weighs in at about ten thousand pounds fully loaded. It is powered by a single Volvo inboard engine/outboard drive powerplant and has a rated maximum speed of twenty-eight knots. Range is 175 nautical miles at twenty-five-knot speeds. Even this little boat mounts a radar—and an M60 7.62mm machine gun. Its principal mission is to deliver a single SEAL fire team (half a squad, four men) to an insertion point. It isn't the stealthiest way to insert a SEAL element on a covert mission, but not all missions require invisibility.

The thirty-foot RIB is quite similar to the twenty-four-foot version, but with two engines driving water jet drives and a higher rated maximum speed of thirty-two knots. The thirty-footer is, as a result, half again heavier, weighing in at a combat weight of about fifteen thousand pounds. Range is slightly less, at 150 nautical miles, and the payload is a bit bigger.

The biggest of the breed is the ten-meter (thirty-three-foot) inflatable. This one will accommodate a whole squad. This means that an entire eight-man SEAL combat element can be cold, wet, and miserable while they huddle behind the dubious armor of two thin sheets of high-tech rubber and about two feet of compressed air on the run in to that hostile shore. The boat can be pumped up to forty knots, just in case the coxswain decides to race an aircraft carrier or perhaps outflank the fleet. And when he gets in range, this inflatable warship carries two weapons mounts accommodating either M60s or Mk 19 grenade launchers. There's enough fuel aboard for about an eight-hour mission, providing a range of around 250 nautical miles.

## Combat Rubber Raiding Craft

One of the most used and useful boats in the inventory is a kind of war-surplus model left over from World War II, the combat rubber raiding craft (CRRC)—the legendary little rubber duck. Originally designed as a life raft, the boat has been adopted and adapted to all sorts of offensive missions. Marines use it, Rangers and Green Berets use it, and of course the SEALs use it, for clandestine surface insertions and extractions. The CRRC weighs only 265 pounds. It gets tossed out of C-130 airplanes or from cargo helicopters, along with the SEALs, into the ocean. It is also launched from submarines, either from the surface or submerged, or gets chucked over the side of larger surface craft.

It's only about fifteen feet long, with a six-foot beam, but it will do about twenty knots. That, of course, requires an outboard engine, a single fifty-five horsepower powerplant with an eighteen-gallon fuel bladder providing a range of about sixty-five miles. That offers over-the-horizon capability, but—trust me on this—you don't want to ride one in to the beach from over the horizon except on the *nicest* of days.

It is an extremely versatile piece of gear. While civilians spend hundreds or thousands of dollars on health clubs and Nordic Track exercise machines, the Navy uses the CRRC at BUD/S to build better bodies eight ways. In fact, the BUD/S instructors have discovered that you don't need fancy machines or chrome-plated weights, just a CRRC; if you have the students hold one overhead for a few minutes it *really* works those upper-body muscles. And, for a little extra help for those who need it, the CRRC can easily hold plenty of wet sand, bringing its weight up to something more challenging.

The inflatables have another virtue lacking in most other Navy property: they are, at times, considered disposable. Rather than go through the time and trouble to bring one back aboard a submerged sub, you may, during real world combat operations, stick your dive knife into one when you're done with your mission and let it sink to the bottom, engine and all. Just make sure that the submarine is standing by for you first!

## Swimmer Delivery Vehicle Mk VIII

Perhaps the most interesting, least publicized, most covert boat the NSW community operates is the wet submersible called the swimmer delivery vehicle (SDV) Mk VIII. It's an odd little submarine SEALs use for fast, covert subsurface insertions. The SDV is like a little speed boat, with rechargeable batteries and an electric motor for propulsion. Like other submarines, the SDV is visually blind and relies on sensors and instrumentation to navigate without bumping into things.

The embarked SEALs climb into a fully enclosed cabin. Although they wear scuba or closed-circuit breathing systems for backup and for work outside the vehicle, the SDV has its own supply of breathing air.

SDVs are launched from surface craft sometimes, but the dry deck shelter (DDS) attached to a submarine is a more typical point of departure. The DDS is like a small hangar, big enough for the SDV and with enough room for the swimmers to enter from the sub and climb into the SDV. The DDS is gradually flooded, the hatch opened, and out goes the SDV in search of adventure. The divers are now essentially in an expensive tin can full of water. It can be a cold ride. As one of its users says:

"It's a strange ride. You can't see out. You fly on instruments the entire time. You are a diver the entire time you're in it. The SDV provides more speed and range than swimming. Quite honestly, the boat will go farther than the man will. Exposure to the cold and to the ambient sea pressure put tremendous strains on the human body that become a limiting factor for missions with SDV. I don't think it's used enough, perhaps because its reliability hasn't always been too great. It is a complicated thing to support and deliver. But if you plan its use properly, if you get it within its range, it is an extremely effective tool because it is almost nondetectable. The ability to deliver either SEALs or ordnance is just phenomenal!"

The vehicle has its own support unit, the SDV team, within SPECWARCOM. These teams maintain and operate the SDV, SEALs who actually man the boats on missions. An operator and a navigator are always assigned; both are fully qualified SEALs who have what amounts to a kind of bus driver job in addition to the usual combat assignments in the objective area.

The SDV is rated to carry six swimmers and their equipment, including the crew of two. A sonar sensor (for object avoidance) and an inertial navigation system allow the operator to cruise around underwater. A third sensor system is sometimes installed as part of a developmental program, but that remains "buggy," a side-scanning sonar for target identification of objects like mines as well as to record bottom contour. Not too surprisingly, a lot of specific performance information about these exotic little boats is classified. While the specifics are secret, we are authorized to hint a lot: The vehicle is about twice as fast as a submerged swimmer; vehicle endurance is probably a lot longer than crew endurance; and the SDV will tolerate up to five hundred feet of water pressure without failing, and that's a lot farther than the crew will go before their sub-systems start to fail! We could tell you more, but then we'd have to kill you.

Actually, though, the whole vehicle was extremely classified for a very long time. It couldn't be moved without being covered, and of course no photographs could be released showing it. But a few years ago, the then commander of SPECWARCOM decided the SDV would be a nice addition to the unit's annual float in the Coronado Fourth of July parade and ordered it displayed on the flatbed trailer, along with the usual "cammied" Naval SPECWARCOM warriors. That's the way it is sometimes around NSW—things that are super-secret on one day and in one place are proudly displayed to the world the next.

## Riverine Patrol and Interdiction

SEAL experience in Vietnam strongly demonstrated the need for good shallow-draft boats with plenty of speed, stealth, space for combat-equipped SEALs, and provisions for both defending and attacking when in contact with enemy forces. That mission still exists today, in Latin America, where the United States is involved in a quiet war in the backwaters of the Amazon basin and elsewhere. The boats from that previous war, along with some new ones, are helping to fight this one. Sometimes SEALs are embarked, sometimes not. In some cases the operators are foreign military or law enforcement people who are equipped and trained by the United States, often by SEALs in the Foreign Internal Defense mission.

## Patrol Boat, River

The patrol boat, river (PBR) has been around since quite early in the Vietnam War. It is still serving long after most of its crews have retired, a design with an interesting history.

When SEAL Team One packed its bags and shipped out to the combat zone in 1966 it was pretty much without a really good boat to support its new missions. Existing navy Landing Craft, Personnel, Launch (LCPL) fleet craft had been modified for the purpose but just didn't seem suitable for the riverine mission of fast, long-range, shallow-draft patrol. That's why, in September 1965, the Navy's Bureau of Ships published a request for bids on a twenty-five to thirty-knot boat with a "dead-in-the-water" draft of eighteen inches and a draft at speed of only nine inches. A slightly modified commercial design from the Hattaras Yacht Company was selected, a twenty-eight-foot boat with Jacuzzi-type propulsion.

The prototype was delivered only two weeks later. After testing, the design was modified, lengthened a bit to thirty-one feet, and christened the PBR Mk I. The boats were being delivered to the navy only a year after the program began. Not much later they were zooming around the Mekong Delta, trading shots with the VC and providing a kind of taxi service for SEALs off on nocturnal excursions.

The PBR was designed for high-speed patrol and insertion operations in rivers and bays. It is a heavily armed and armored boat, designed for combat at close quarters, with special ceramic armor similar to that used on tanks applied to the vessels' crew compartment. The hull is made of thick, reinforced fiberglass and is designed to accept the stresses of recoiling heavy machine guns and grenade launchers. The current PBR in service is thirty-two feet long, with a beam of about twelve feet. It weighs about eighteen thousand pounds, light enough to be transported on C-5 Galaxy aircraft.

While fairly ancient as military systems go, it is still an amazing boat. The two big General Electric diesel engines will tootle along quietly or crank up 215 horsepower each when required. Those engines each drive a fourteen-inch Jacuzzi pump; the water squirts out of 5.75-inch nozzles, making the boat go faster than thirty knots—in excess of thirty-five miles an hour to you landlubbers. Of course, that's with the water jets clean, and they do clog up. It has a range of two hundred miles on 160 gallons of fuel. Normal crew complement is four.

A lot of bullets have dinged off the hulls and armor of PBRs, and a lot of crewmen have died aboard them. The boats have done a lot of shooting of their own. Standard equipment

includes a tub-mounted twin M2 .50-caliber machine gun system in the bow; that's industrial-strength firepower guaranteed to "clean the clock" of almost any point target within two kilometers. There is also a pedestal mount for another M2 .50-caliber and a mount for the marvelous Mk 19 grenade launcher, a type of machine gun that fires 40mm, baseball-sized projectiles to better than two kilometers. As options you can sometimes get a 60mm mortar installed, with or without M60 machine guns, and additional .50-caliber and 40mm machine guns mounted amidship. Of the more than five hundred PBRs built since 1966 only twenty-four or so remain in service. A new design is in the works.

## Patrol Boat, Light

The patrol boat, light (PBL) is another modified off-the-shelf civilian design from that distant era; still in use is the twenty-five-foot military version of the Boston Whaler, an unsinkable little boat powered by a pair of big engines and mounting two heavy weapons, the M2 .50-caliber machine gun and/or the Mk 19 grenade launcher. The PBL is a light, fast, air-portable, quiet, somewhat vulnerable boat that has evolved a bit over the years but continues to support the riverine mission after almost three decades in the inventory.

Like the PBR, it uses water-jet propulsion to achieve better than thirty-knot speeds on flat water. It will turn on a proverbial dime—in fact, the boat will turn a lot faster than the coxswain and crew will probably find comfortable, a 180-degree about-face in less than thirty feet while doing thirty knots. While the g-load of such a maneuver could easily toss most everybody right out of the boat, it is a handy capability for those times you come blasting around a bend and find a horde of bad guys waiting for your arrival.

Two pedestal-mounted "Ma Duce" heavy machine guns are mounted just forward of the coxswain's position. This provides all-aspect firepower for breaking contact when the crew of three thinks it is necessary. There is also a third mount farther forward, and any combination of .50-caliber and 7.62mm machine guns can be installed.

Although the PBL draws about a foot and a half of water when stopped, at speed it will just about operate in a mud puddle, skimming along on the surface of the water rather than through it. The two engines will run at full throttle for eight hours on a tank of fuel, driving the boat across about 160 nautical miles of river or canal at more than twenty-five knots. It uses standard twin engines, with dual steerage, ignition, and controls for backup redundancy.

It is an extremely mobile little boat, in and out of the water. The PBL can travel on a conventional trailer, be rigged as a sling load for a helicopter, or be loaded aboard a C-130. A lot of PBLs have traveled to Latin American military forces, where they are justifiably popular with the counter-narcotics forces patrolling the Amazon delta and other riverine battlefields.

## Mini-Armored Troop Carrier

The mini-armored troop carrier (MATC) is a kind of small landing craft similar to the ones marines have been using to come ashore for decades, only smaller. It has a flat, ramp-type bow that drops forward to eject a whole platoon of sixteen combat-equipped SEALs onto a beach. It is a riverine craft with shallow draft and all the sea-keeping qualities of a cork. Like the PBR and most other riverine craft, the MATC has a water-jet propulsion system that "vacuums" the boat through the water, Jacuzzi fashion. A crew of three operates the boat.

Its hull is thirty-six feet long, made of aluminum, and is designed for high-speed patrol, interdiction, and combat assault missions on the relatively flat waters of bays, rivers, canals, and protected coastal areas. It is serious about all this—there are seven weapons stations for heavy machine guns or grenade launchers and a 60mm mortar can be installed. It comes with a high-resolution radar and a rack of radios for every taste and purpose. The boat weighs about twenty-five thousand pounds, is good for about thirty knots and a range of 230 nautical miles from 430 gallons of fuel.

In the grand SEAL tradition, the boat is fast and sneaky. It has a low six-foot profile that's hard to see or pick up on radar (well, for a slab-sided metal-hulled boat). The engines are extremely quiet. What this all means is that you can pile a bunch of weapons and troops aboard, run up the river to a likely spot, slide into the weeds and woodwork along the bank, and wait, engine at idle. With good comms you can talk to surveillance aircraft overhead, other teams ashore and afloat in the area, and wait for your victim to come chugging down the creek. When the perpetrators of the crime arrive on scene, the MATC has the troops and the firepower to negotiate with just about anybody and win through intimidation.

RIBs have become popular with the NSW community because the rigid hull eliminates the problem of flexing that limits the conventional inflatables like the F-470. The stiffening allows much higher speeds and guaranteed buoyancy offshore in conditions up to Sea State 5 or 6 (waves eighteen feet high, winds to about thirty knots).

Chapter 7

# LEADER'S RECON

Before a combat operation, particularly ashore, a commander will, time permitting, travel to the objective area for eyes on the target, as Lieutenant Tom Dietz did before the diversionary raid on the Iraqi coastal defenses in Kuwait. This personal study by a combat commander of an area where conflict will occur is called "leader's recon." There is no good substitute for this kind of personal, direct contact by the combat leader with the battlefield. For people within military communities there are all kinds of battlefields besides the kind we usually think of. Some are institutional, within the unit, while others are the political, doctrinal, policy arenas. For the past fifty years, SEALs have had to adapt to changes in the world, in the U.S. armed forces, in the navy, and within NSW itself. These internal battles shape the nature of the institution that will fight the wars of the future. These institutional, peacetime conflicts are tremendously dangerous—not for the present, but for the time when push comes to shove, as it always seems to do.

Among the most dangerous things SEALs need to worry about is complacency on their own part, about bad tactical habits, about inexperience and overconfidence. Despite several combat operations over the last couple of decades, the SEAL community today is almost completely inexperienced in war—and this is a dangerous thing. War is different than training, no matter how tough that training may be.

Combat experience is slipping away from the navy. The last Navy Medal of Honor winner retired in 1992, and nearly all the Vietnam combat veterans have left the formal military service. One of these men with a great deal of combat time is Commander Gary Stubblefield, recently retired but still actively working with NSW as a consultant and contractor. With retirement comes a greater freedom to discuss NSW issues. The following are a kind of leader's recon offered by Stubblefield, a selection of opinions and insights about the life and times of SEALs today and in the future. His observations are a rare insight into the challenges of the present and future for NSW.

*(Continued on page 118)*

The SEAL and NSW community demands a level of skill, commitment, and discipline that are extreme, even within the special operations community. For the very few men who complete the BUD/S program and then make a career as an NSW warrior, the demands and dangers never let up. As long as he is on a SEAL team, life is a continuous cycle of workups and deployments to the sandbox or other exotic travel destinations.

The men of the SBSs, like the crew of this Mk V special operations craft (SOC) lighting up the beach with their M2HB .50-cal machine guns, endure training and missions nearly as dangerous and demanding as their brother warriors on the SEAL teams, but without much of the glory. They do, however, get a full measure of credit from the guys on the teams, especially when they show up to collect a squad from a mission ashore. They are much more than a taxi service for SEALs and execute missions entirely on their own.

*(Continued from page 114)*

## Deployment and Tasking

"Since the time I started in this business twenty-five years ago, I've seen a lot of changes. One is that now our people expect to receive their missions while sitting here in the States or in some forward-deployed base overseas—receipt of mission from higher authority, rather than developing our own missions from within the area where we will operate. In Vietnam we set up our own bases, designed our own missions, and, unless somebody thought we were doing something really stupid, we were left alone. Now we are directed by higher authority. When Ray Smith was operating in the Gulf, he was getting messages from the CINC [commander in chief] saying, 'Conduct SEAL operations here, here, and here.'"

## Planning and Accountability

"We've become very good at developing overhead intelligence-collecting from aircraft and satellites. We've lost the ability to develop good human intelligence, the ability to develop information from people, face-to-face. We were great at that, and it was so much better than what we even get now from the overhead systems. But you only get human intelligence by living there, by being part of the community, by building rapport with the host nation—it's the only way that will work. Now we do our planning in an insular way.

"Now I receive my intel, develop a concept or a series of options for an operation, and then I have to send it back to my boss and say, 'Here's what I intend to do; what do you think?' He may have to run the idea up the chain of command even further! Then he'll come back and say, 'This is the one I choose for you.' Then I have to develop that option—and send it up to my boss for approval again! It comes back with his changes . . . and only then can you brief your people. All this time the platoon is milling around, trying to get organized for something—but they aren't at all sure just what it will be.

"This kind of micro-management is the sort of thing we were getting into down in Panama. We were getting into operations where we required outside people, who weren't on the ground

This page and opposite: SEALs have been putting a lot of lead downrange lately, sometimes very far from the beach. In the process, they've been out on the pointy end of the spear, accomplishing missions for the Global War on Terrorism all out of proportion to the number of guns they have in the fight. Individual SEALs have been awarded two Navy Crosses, twenty-three Silver Stars, eight Legions of Merit, and more than five hundred Bronze Stars with V device for valor. Forty-eight Purple Hearts have been awarded (at this writing) for SEALs wounded and killed in action.

with us, telling us how we were going to do things, based on our written plan—asking for permission, which is asking for trouble.

"We tend to do more of our planning now for somebody else, rather than for the teams, to demonstrate that we know how to do something when we're evaluated by our higher authority, or in an exercise where we're demonstrating to an umpire that we're doing things according to doctrine. If you were to take that same platoon and turn them out into an op area for six months where they eat, breathe, and live in the area, like we did on the barges in the Persian Gulf during the Iran-Iraq war, pretty soon you fall into the old habits. You know your operation on the basis of the lowest common denominator and use the KISS principle [keep it simple, stupid!]. That way you have fewer things go wrong, you have a simpler operation to run, you rely on your knowledge of your platoon to deal with contingencies. That's called *flexibility*."

## SEAL Virtues and Vices

"We're quite good at maritime direct action missions—where we ourselves are out there, in the water, delivering the munitions, collecting reconnaissance. Second, we are capable of doing long-range, long-duration missions, but we haven't typically been very good at it. The reason is that when you do these long missions, with all their logistics support requirements, you lose the ability to be fast, light, mobile. The minute you start putting on hundred-pound packs you lose that ability to do what we've traditionally done best."

## Training Environment vs. the Real World

"I see a lot of guys who just don't get serious about our business. People have a tendency in training, in noncombat exercises, to take shortcuts. We can't afford to do that in this business. The way that you train is the way that you fight. If you get used to taking shortcuts because it's not dangerous, you'll get killed by that shortcut out in the real world. The business that we do is inherently dangerous anyway—parachuting, diving with closed-circuit rigs, locking out of submarines, working with explosives, shooting close to each other—those

things are dangerous, but there is a difference even between doing them in training and in combat.

"I cannot explain to somebody until they see it for themselves what it is like to have somebody fall down beside them with a bullet in them, blood coming out of them—to lose a friend—to explain to them that they are vulnerable. You feel like you are almost invincible until you see something like that—and you never get that same feeling in any exercise, no matter how tough we make it. It takes something like that to make you really get serious about this business.

"Because there aren't real bullets going by overhead, people today don't realize you don't go very far very fast in combat. We have a tendency today to say we can travel twelve nautical miles an hour—a figure that is only realistic in a noncombat environment. It was not unusual in Vietnam to take an hour to go a hundred meters back then; you had noise control, mud to contend with, water up to your chest. A hundred meters in an hour was rather fast. But we typically expect much faster movement from our SEALs today.

"Another thing we need to learn is to stop carrying all this extra gear; lighter, faster, smaller is better! I see guys going out with two hundred rounds—you don't need all that. You need to stay mobile, you need to stay light, you don't want to sink too deep in the mud. You need to go back to basics again . . . when you get in the real world.

"But when I left SEAL Team Three we had only five guys out of two hundred and five people who ever had any combat time—and I'll bet that, out of those five guys, not all of them had ever seen anybody get hurt! So you've got five guys who are serious and about two hundred who say, 'I like this job, it's neat, it's fun . . .' Years ago, when we had teams come back with ten of the fourteen guys on a platoon having been wounded, we had a lot of guys who said ' . . . Uh, look, I don't want to do this anymore, I think I'll get out.' We don't have that now because we don't have all those casualties."

## Technology—A Blessing and a Curse

"Our weapons system, operating gear, and radios are all better now than ever before. Technology has helped us in many ways, but now we tend to load up on this stuff, because we have it. I've actually stopped people getting ready for an operation and had them weigh their packs—which turned out to weigh a hundred and ten pounds—for a three-day operation, and I say, 'What's wrong with this picture?' You don't need to do that! You need a couple of LRRPs [similar to MREs], enough water to get you by for that period, your weapon and ammunition—and that's it. Let's go! Batteries, maybe an extra radio, no more than that.

"We have a tendency today to do more whiz-bang stuff, night vision sight systems, laser aim-point systems; it's smaller/lighter/faster today. If I had to go back over there today, I think we'd operate pretty much the same kind of ops."

## Joint Operations and the Multi-Service Environment

"In Vietnam, our boat support units lived with us in the same hut. I could go over to the next bunk and say, 'We're going on an op tomorrow night. Can you have this boat ready to go?' Nowadays assets like boats are coordinated by multi-services. If I need a boat now, even though it's internal, I have to make sure everybody knows about it because somebody else may be planning to use the same boat. So, I have to go to higher authority, tell them I need this boat, get my ticket punched, then I can go over to the guy on the next bunk and talk to him about it. If it's a helicopter that could belong to the air force or the army, I might have to go all the way up the chain of command, find out if it's okay, involve them in my planning process, make them part of the mission planning. Since I'm not living in my op area, I have to rely on higher headquarters to de-conflict my mission, to make sure that they aren't sending an army Green Beret A team into the same area, where we might end up shooting at each other.

"We used to be well-segregated from other friendly units in Vietnam. We all had our assigned AO [Area of Operations], and you didn't cross over without checking with the other team. The same thing applied to the boat units—I could go to the riverine boat commander and say, 'You guys working in here? No? Well, we are, and I don't want you going in there with your boats now.' Nowadays you can't do it that simple."

## Parachute Operations for SEALs

"The rule for parachute operations is: If you have to jump, go find another way; if you still can't find another way, make sure you observe the restrictions on wind speed, weights, all that. We have a tendency to make things more complicated than they need to be—we should always go to the lowest common denominator. We have a tendency to send more people than we need when instead we ought to take the minimum. That makes for much better command and control."

Chapter 8

# SEALs AT WAR—
# CHANGE OF MISSION FOR NSW

SEAL team leader with Special Operations Task Force–South guides Afghan commandos on a foot patrol during an operation to impede insurgent activity in the Khakrez district in the Kandahar province, Afghanistan, 12 March 2011. The commandos are with the 3rd Commando Kandak. *U.S. Army photo by Spc. Daniel P. Shook*

Since the attack on 9/11, there have been a lot of changes in the way American special operations forces are used. In the past, the army's Special Forces, Rangers, and Delta all competed with the navy's SEALs and Special Boat Teams for special operations money, missions, and "trigger time." The air force also had its own special operators on the ground, and the marines did too. Today, however, there is an amazing amount of cooperation and mutual support. For example, you can find U.S. Air Force personnel integrated into SEAL missions, parachuting with them, hiking with them, and fighting alongside the SEALs.

SEAL snipers have been extremely active during many combat operations in Iraq and Afghanistan, supporting conventional forces of the Army such as the 4th Infantry Division. By military doctrine, using SEALs for operations far from water does not seem to make sense. But today, SEALs are a resource for combat commanders and have been used a lot.

## Trigger Time

Before 2003, when American units began sustained ground combat operations in Afghanistan, SEALs trained for war but seldom actually engaged in combat. Since 2003, NAVSPECWARCOM has been making sure that SEALs are all being "blooded." SEALs are now rotated in and out of Afghanistan and Iraq, and the team guys make kills. It is not a pretty subject, and the WARCOM public affairs office will not talk about it, but killing enemy combatants has become a high training priority for every member of a SEAL team. Range time is one thing; putting bullets into people is different. It is an activity that BUD/S cannot simulate.

While most American military personnel deploy for twelve months or more, SEAL teams typically spend only one hundred days "downrange." The operations tempo is higher, SEALs get beat up by the missions, and they rotate back to CONUS after a little more than three months. This "churning" would be a problem for conventional units, but it has worked for the SEALs. And it also makes sure that everybody gets "trigger time."

## Unconventional Warfare

NAVSPECWARCOM now claims "unconventional warfare" (UW) as one of the missions for the SEAL/SBS community. U.S. Army Special Forces, or Green Berets, find this claim hilarious. The Green Berets have been experts in UW for more than fifty years; it is the foundation of their mission. They are legendary for missions involving covert insertion of teams (the

SEAL snipers rank with the best combat marksmen in the world. Shown here is a SEAL sniper in a gilly suit, photographed during a capabilities demonstration at Joint Expeditionary Base Little Creek, Virginia. *U.S. Navy photo by Chief Mass Communication Specialist Stan Travioli*

A U.S. Navy SEAL team member with Special Operations Task Force–South provides security during a clearing operation in the Panjwai district of Kandahar province, Afghanistan, in April 2011. *U.S. Army photo by Spc. Daniel P. Shook*

SEALs in Kuwait operate Desert Patrol Vehicles (DPV) while preparing for an upcoming February 2002 mission. Each "dune buggy" is outfitted with complex communication and weapon systems designed for the harsh desert terrain. The SEALs' use of the dune buggy DPVs harkens back to the legendary David Stirling's Special Air Service of World War II fame and their "taxi service" in North Africa, the Long Range Desert Group. *U.S. Navy photo by Photographer's Mate 1st Class Arlo Abrahamson*

legendary A-team or A-detachment, as it is known today, is designed around the UW mission) behind enemy lines for long periods.

As developed by the Green Berets, a UW mission requires foreign language skills, the ability to fit into a foreign culture, and the ability to recruit, train, equip, and lead a battalion-sized force of fighters as was done in World War II by OSS teams in France, Italy, and Indochina. Green Berets have all these skills. They train for them in their Q Course and test them in deployments around the world—it's their primary business. SEALs do many things exceptionally well, but foreign language skills and cultural sensitivity are not part of their program. When SEALs interact with foreign nationals, it is often by killing them. Traditional UW is the Green Beret's business. When NAVSPECWARCOM claims a UW mission for the SEALs, it seems like JSOC politics.

## The Myth of the Best Warrior

When SEALs make the news, reporters frequently make foolish remarks about them being "the best warriors in the world." This silly comment is not true and would be a risky thing to say in the company of, for example, members of Delta. There is no way to measure the overall quality of groups of combatants, and there are many kinds of "best" to consider.

The British Special Air Service (SAS) and Special Boat Service have both proved superb at many kinds of special operations. The British have a selection and training program that is exquisitely difficult for any special operations force (SOF) team member. The Russian Spetznaz have their own amazing skill set. The U.S. Army's Rangers also have their own brand of "best," with skills and training different from SEALs. And the army's Special Forces, along with the spin-off Delta Force, conduct missions that SEALs would find outside their training and doctrine, particularly the behind-the-lines, long-term guerilla missions called "unconventional warfare."

Each of these communities exists for a specific kind of mission, and each is trained, equipped, and plans for different problems. As one Green Beret battalion commander told me, "We're all pretty much cross-trained on each other's missions, and all of us are trained to conduct raids, water operations, deep reconnaissance, and some kinds of unconventional warfare. Within the American special operations community, SEALs are

Navy SEALs from all over the country took turns pounding the Tridents taken from their uniforms into the casket of Special Warfare Operator (SEAL) 3rd Class Denis Miranda during his 30 September 2010 funeral. One U.S. Army Special Forces operator placed his SF patch on the casket. Miranda was one of nine military service members killed when the helicopter in which they were traveling crashed in Zabul Province in Southern Afghanistan. *U.S. Navy photo by Mass Communication Specialist 2nd Class John Scorza*

the best at maritime operations, but you can't say they are the best at everything."

SEALs are "best" worldwide, as far as we can tell, at missions involving maritime environments—operations with "one foot in the water," as they say. They are also superb at small-unit raids and small direct-action missions, but perhaps no better than Rangers, Recon, Delta, or some army Special Forces units. And the British SAS operators are probably the equal of them all.

But SEALs as well as the rest of these SOF warriors would fail miserably if tasked with the kind of "unconventional warfare" mission that's been the foundation of the Green Berets since their "birth" in the early 1950s—a mission that requires foreign language skills, tact, diplomacy, and an ability to operate behind enemy lines for months at a time. Tact and diplomacy are not taught at BUD/S, but they are a big part of the Q Course for Green Berets. SEALs are the best at beach surveys, and Green Berets are best at long-term behind-the-lines missions—and there's no yardstick that can measure one skill against the other.

Master-at-Arms 2nd Class (SEAL) Michael A. Monsoor poses for a photo during Operation Iraqi Freedom. Monsoor was posthumously awarded the Medal of Honor for diving onto a grenade to save his teammates in Ar Ramadi, Iraq on 29 September 2006. Monsoor also received the Silver Star for his actions in May during the same deployment in 2006 when he exposed himself to heavy enemy fire to rescue and treat an injured teammate. *U.S. Navy photo courtesy Monsoor family*

Navy SEAL Lt. Michael P. Murphy was posthumously awarded the Medal of Honor for his actions on 28 June 2005 while leading a four-man team tasked with finding a key Taliban leader in the mountains near Asadabad, Afghanistan. The team came under fire from a much larger enemy force with superior tactical position. Murphy left his cover to get a clear radio signal with his headquarters and was mortally wounded while exposing himself to enemy fire. Murphy provided his unit's location and requested immediate support. He returned to his cover position to continue the fight until finally succumbing to his wounds. *U.S. Navy photo*

## Lessons Learned

If the Naval Special Warfare community has learned anything, it is that even SEALs are not bulletproof. The sailor who gets through BUD/S and proves himself on a team is an exceptionally capable warrior who rightfully owns a big ego. Unsurprisingly, they used to have a tendency to feel a bit bulletproof.

The bulletproof mentality went away after Petty Officer Neil Roberts was killed in Afghanistan in 2002. Then Lt. Michael Murphy, Petty Officer Matthew Axelson, and Petty Officer Danny Dietz were all killed in a combat operation on 28 June 2005. Eight other SEALs coming to their rescue were also killed, along with eight U.S. Army Night Stalkers helicopter crewmen. It was the deadliest day in SEAL history up to that point. Marc Lee was killed in combat on 2 August 2006, the first SEAL killed in Iraq.

SEALs make mistakes—sometimes lethal mistakes, even in training—that may be a result of the bulletproof attitude. While working on the first edition of this book, one of the SEALs I was photographing had a "negligent discharge" of his M4 carbine and shot a teammate two or three times at very close range. The same week, another platoon from the same team had a vehicle rollover, resulting in several fatalities. Neither made news because NSW public affairs did not release information.

The last ten years of combat operations have been good for NSW. Training standards remain high, budgets are generous, and plenty of excellent young sailors still apply for BUD/S. Selection and training processes have been refined so that BUD/S and SEAL Qualification and Training (SQT) produces guys who are better prepared than ever.

As a result of lessons learned, deployments are also done differently. Now the teams deploy as complete units. Everybody goes downrange together—the commander, the staff, the supply section, and the support units. Teams are now more sensitive to issues and able to respond quickly.

## "At My Command . . . FIRE!"—The Counter-Piracy Mission

The U.S. Navy, Marine Corps, and Coast Guard have been

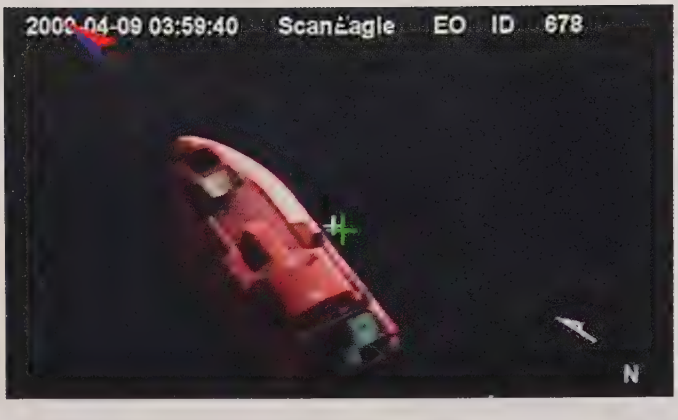
A ScanEagle unmanned aerial vehicle launches from the flight deck aboard amphibious dock landing ship USS *Comstock* (LSD 45) in the Persian Gulf, 20 May 2011. ScanEagle carries an electro-optical and/or infrared camera, has a communications range over 100 kilometers, and can fly 20-plus hours. ScanEagle has a 10-foot wingspan and has an average cruising speed of 60 knots. *Mass Communication Specialist 2nd Class Joseph M. Buliavac, U.S. Navy*

conducting anti-piracy missions on the high seas for years, normally without much fanfare or media coverage. Hundreds of ships are attacked by pirates every year, sometimes with violence, often at great expense to their owners. Despite the threat and its associated costs, piracy in the Gulf of Aden did not get much attention until early April 2009. Four Somali pirates boarded the freighter *Maersk Alabama* and took the captain, Richard Phillips, hostage.

This was the first capture of an American-flagged merchant ship in two hundred years, and it provoked two major changes by the American government, both involving SEALs. Prior to this event, pirates usually ransomed the vessels for large amounts of money, normally without bloodshed. But since the capture of the *Alabama*, merchant ships now resist capture, and there is plenty of bloodshed.

In response to this capture on 8 April 2009, the U.S. Navy sent the USS *Bainbridge* to the scene. The destroyer arrived the next day, 9 April. After attempting to exchange a captured pirate for Captain Phillips, the other pirates backed out, taking Phillips hostage in one of the *Alabama*'s lifeboats.

In previous circumstances, ransom was paid. But now the navy was confrontational and ordered two other ships to the scene, the amphibious assault ship USS *Boxer* and frigate USS *Halliburton*. The *Bainbridge* began blocking the pirate's lifeboat from returning to shore. After two days of negotiation and




A 28-foot lifeboat from the U.S.-flagged container ship *Maersk Alabama* is shown in this still frame from a video taken by a ScanEagle unmanned aerial vehicle flying over the Indian Ocean, 9 April 2009. *U.S. Navy*

A team from the amphibious assault ship USS *Boxer* (LHD 4) tows the lifeboat from the *Maersk Alabama* to the *Boxer* 13 April 2009 in the Indian Ocean. The lifeboat is to be processed for evidence after the successful rescue of Capt. Richard Phillips. *Mass Communication Specialist 2nd Class Jon Rasmussen, U. S. Navy*

MV *Maersk Alabama* Capt. Richard Phillips thanks U.S. sailors on board USS *Bainbridge* (DDG 96) in Port Norfolk, Virginia, 19 November 2009, for their part in his rescue from Somali pirates. *Mass Communication Specialist 3rd Class David Danals, Department of Defense*

A sniper fires an SR-25 rifle from a helicopter. The weapon is supported by a vibration-isolating web of bungee cords that dampen the motion of the aircraft. It's not the most stable platform for a sniper, but it's the best option under the circumstances. *U.S. Navy*

threats, the on-scene commander, Commander Frank Costellano, determined that Phillip's life was in danger. Costellano authorized the use of force against the three pirates.

During the night of 10 April, several SEAL snipers with weapons and gear parachuted into the sea. They were picked up and delivered covertly to *Bainbridge*. Three of the group were snipers from SEAL Team Six (ST6). After being briefed and establishing secure comms with the destroyer's CIC (combat information center), the three snipers took up firing positions on the *Bainbridge*'s stern and began preparing to engage the three pirates.

Five days after Phillips was taken hostage, the lifeboat was getting low on fuel, and the pirates appeared to be becoming extremely stressed. The pirates agreed to take a tow from the

Visit, board, search, and seizure (VBSS) team members from the guided-missile cruiser USS *Vella Gulf* (CG 72) close in on rigid-hulled inflatable boats on 12 February 2009 to apprehend suspected pirates. Nine suspected pirates were apprehended and brought aboard. *Vella Gulf* is the flagship for Combined Task Force 151, a multinational task force conducting counter-piracy operations to detect and deter piracy in and around the Gulf of Aden, Arabian Gulf, Indian Ocean, and Red Sea. *Mass Communications Specialist 2nd Class Jason R. Zalasky, U.S. Navy*

SEAL snipers provide overwatch security during VBSS missions and are able to detect and engage threats not visible to the boarding team. The small dots visible in the rifle's reticule allow a trained sniper to estimate range with enough precision to deliver accurate fire at long ranges. Even so, maritime sniper engagements are among the most difficult and challenging for SEALs and other snipers, since both the target and the weapon are in constant motion. *Author's collection*

ship and attached a line to the lifeboat. This stabilized the lifeboat and put it much closer to the SEALs' firing position.

The SEAL snipers had several serious challenges. The range from their position on the *Bainbridge*'s fantail to their targets was extremely short, about 40 meters. That is much closer than normal for the optics normally mounted on sniper rifles. Second, the targets were moving about the boat. And one of the pirates was behind one of the Plexiglas windows of the lifeboat, a material that would probably deflect a bullet.

With one of the pirates always holding an AK on Captain Phillips, the possibility that the hostage would die in any use of force was high. The team developed a plan to engage all three pirates with simultaneous shots. The chance came when two pirates peered from open hatches while the third was visible through a window. Communicating by radio, all three snipers fired at the same moment, each at a pre-designated target. Two apparently used .308-caliber SR-25s, the third a heavier .338 Lapuaa Magnum or possibly even a .50 caliber. All three pirates were killed instantly by head shots.

The legacy of this engagement has been profound. Piracy off the horn of Africa and in the western Pacific is taken far more seriously now than before the *Maersk Alabama* mission. Today, largely overlooked by the media, there is an active counter-piracy campaign operating. Snipers from American special operations forces (SOF) and those of other nations are stationed aboard ships transiting the Gulf of Aden and other trouble spots. Some are active-duty snipers from teams with special assignment missions; some are contractors working directly for shipping companies. Either way, they are typically armed with sniper rifles in heavy calibers (.300 WinMag, .338 Lapuua, .50 caliber). They carry NODs, good comm gear, and are "armed" with the authority to "discourage" piracy on the high seas.

Chapter 9

# AMERICA'S MOST WANTED—
# THE MISSION TO KILL OSAMA BIN LADEN

At approximately 2330 hours local time, 1 May 2011, a small armada of helicopters pulled pitch and lifted off on a mission that had been planned and practiced for weeks. Watching closely from the other side of the world, the president and the National Command Authority monitored the mission in real time.

The mission to capture or kill Osama bin Laden, the OBL raid, was a perfect example of what battle staffs call "high risk, high payoff" operations. Beginning nine months earlier, pieces of an enormous puzzle were gradually fitting together, bits of information from thousands of anonymous "intel" specialists from the Central Intelligence Agency (CIA) and elsewhere. As the bits came together, a mission to get Osama bin Laden started to evolve, a mission designed by hundreds of people within Joint Special Operations Command (JSOC).

Afterwards, U.S. Navy SEALs got the credit from the news media, but the mission involved many players from dozens of military communities and special operations forces. For example, the helicopters were from the army's Night Stalkers, the 160th Special Operations Aviation Regiment (SOAR), a unit that is even more covert than the SEAL teams. The Night Stalkers have been practicing and perfecting nighttime air assault missions for many years.

The first two MH-60 Black Hawk helicopters leading the mission held about twenty-two assault team members, mostly U.S. Navy SEALs, but including some agents of the CIA, one combat dog and handler, and an interpreter. The two MH-60s delivering the assault teams were both modified versions with stealthy characteristics. It's said they do not show up on radar and are, according to reports from operators who have seen them in action, incredibly quiet.

During a Sensitive Site Exploitation mission in the Zhawar Kili area of Eastern Afghanistan on 12 January 2002, members of a U.S. Navy Seal team found valuable intelligence information, including this Osama bin Laden propaganda poster. *Department of Defense*

News reports after the mission will describe only two helicopters on the OBL raid, an impossible number to knowledgeable observers. There were, in fact, probably more than

The new special operations MH-60M Black Hawk brings many impressive capabilities, including state-of-the-art day and night optics systems, enhanced integrated weapons systems, multi-mode radar with all-weather capability, and new high-performance engines. This Blackhawk is the first M model Blackhawk to be received by the army's 160th Special Operations Aviation Regiment. *160th Special Operations Aviation Regiment*

six helicopters plus support aircraft overhead. Two MH-60s can lift only about ten to twelve combat-equipped SEALs, even with the seats out and all combatants sitting on the aircraft floor. Most likely, two MH-60s probably delivered the assault teams, in two groups of eleven, into the compound, while other helicopters delivered the support SEALs to blocking positions nearby.

Besides the assault force, at least one MH-60 was designated as a spare. And for additional insurance, at least one or two additional helicopters, likely including an MH-47 Chinook, carried a security team. Their mission was to protect the objective from any Pakistani response and augment the raiders in the event that the assault team needed backup to deal with enemy defenders inside the compound.

## The Art of the Raid

A raid like the one on the bin Laden compound is essentially a "deep strike" mission behind enemy lines. American warfighters have been conducting these missions for over forty years, and it has become a military art form for SEALs, Green Berets, Delta, Rangers, and others. Here are the fundamentals:

"High-risk, high-payoff" operations get extensive planning, beginning with collecting and refining huge amounts of "intel" data. The bin Laden mission started with scraps of information about a courier's identity. The courier was then found and tracked at a distance. When his location was identified, about nine months before the assault, huge

During a Northern Edge 2009 training exercise, members of a West Coast–based Navy SEAL team participate in infiltration and exfiltration training. An army aviation unit transported the SEALs in CH-47D Chinook helicopters, performing two-wheel landings atop mountainous terrain in the Joint Pacific Alaska Range Complex. A special operations version of the Chinook was used to transport SEALs and other mission personnel in the Osama bin Laden mission. *Lance Corporal Ryan Rholes, U.S. Marine Corps*

numbers of overhead photographs of the compound were made. At the same time, covert operators infiltrated the area. Surveillance "safe houses" were set up, and the walled compound was monitored constantly and invisibly.

## Safe Houses and Overwatch Surveillance

Early in the planning sequence, soon after the compound was identified, at least one and perhaps three or more surveillance teams went to work. American personnel might have been part of these teams; the Green Berets have the cultural and language skills to infiltrate the area and to covertly watch the compound. But it is more likely that Pakistani nationals working for the CIA or others rented or purchased homes nearby, within sight of the compound.

Preceding the mission, someone would keep eyes on the place. There would be monitoring, recording, and reporting on all activity, twenty-four hours a day. Surveillance missions are notoriously difficult and dangerous when human eyeballs are required. Today, however, home security systems are so common, even in Pakistan, that cameras pointed at the compound would have caused no comment with the locals. A home security system, purchased in Pakistan and connected to the Internet, could provide a constant feed of information to the intel specialists planning the raid.

Considering the value of the target, the openness of the location, and the amount of time spent on planning the operation, it is very likely that an intense surveillance program was in place for months before the raid. Besides safe houses and overwatch positions, teams would have monitored all activity around the area and driven past the compound on an irregular basis. Listening devices were probably installed. Drone over-flights collected daylight and infrared imagery, as well as cell phone traffic and any other digital information that would be useful.

## The E&E Plan

A standard component of the planning for every SEAL and SOF mission is to anticipate what to do when the whole

mission goes to hell, as it sometimes does. All the SEALs and other raiders on any mission have been briefed on an E&E, or escape-and-evasion plan. Each man has an E&E kit somewhere in his gear, probably in a pants pocket. Every mission briefing includes a detailed discussion of how to escape capture and move back to American forces. For the OBL raid, this would have included the locations of the "safe houses" (a "war RV" in SEAL slang) near the objective, how to find it, how to gain entry, and what support would be available there.

## 2400 Hours—Launching the Mission

Covert insertions of raid teams follow a standard format, with variations based on the specific tactical situation. For the OBL raid, here is how it probably went down:

The SEALs and other personnel load into at least three and probably more MH-60 helicopters, with about ten SEALs to each aircraft. Two of the MH-60s carry the actual entry teams; another two carry a security element to guard the objective while the raid is conducted.

The SEALs are equipped for only a short time on the ground. They will wear regular body armor and helmets. Most will carry M4 carbines with suppressors and laser aiming systems.

The helicopter crews have flown this mission profile hundreds of times and are entirely comfortable with most of it. After the flight lifts off from its austere launch site in eastern Afghanistan, the aircraft navigation lights are turned off. The pilots use binocular night observation devices (NODs) to watch the terrain below.

Flying "contour" at night under NODs is hugely exciting and very strange, a bit like driving 100 miles per hour on a freeway with no lights. The pilots skim above the ground at 120 knots or more, following the rise and fall of the terrain below. This

Real-time intelligence from American unmanned aerial vehicles (UAVs) is a critical aspect of successfully planning and executing a raid such as the OBL mission. Pictured here, a U.S. Air Force MQ-1B Predator unmanned aerial vehicle takes off. The Predator is 27 feet long with a wingspan of 48.7 feet. It cruises at 70 to 90 knots and has a service ceiling of 25,000 feet. The Predator can fly for 24 hours at a time and has a range of 2,000 nautical miles. Note the AGM-114 Hellfire missiles carried under each wing. The Hellfire is a 100-pound air-to-surface missile that has been in use since the 1980s. Tech Sergeant Sabrina Johnson

*Department of Defense*

Crews of the 160th Special Operations Aviation Regiment train extensively for night operations, more than earning the nickname "Night Stalkers." Here, a Night Stalker MH-47 Chinook helicopter pilot adjusts his night vision goggles prior to a night mission during training exercise.

*Tech Sergeant Marvin Krause, Department of Defense*

technique masks the sound and appearance of the aircraft to observers on the ground, minimizing the risk from ground fire. If you are wearing NODs, the sensation of speed is amazing.

## 0130 Hours

The two assault helicopters arrive at the compound in trail formation, one behind the other. Standard procedure for such assaults is for one team to take the objective from the roof, the other from the ground, each moving like a methodical snake toward a link-up in the middle.

The OBL raid compound presents some challenges for the Night Stalker crews. There is room inside the walls for one helicopter to land, but it is tight: the rotor arc for the MH-60 is about 53 feet and the compound was about 80 feet across. About 40 yards from the western edge of the compound is a high-tension power line with heavy wires blocking movement from that side. Open fields on either side, however, offer excellent and unobstructed landing zones for the back-up helicopters.

Two entry teams, each to insert by 160th SOAR MH-60 helicopters with "stealth" modifications, are to assault and clear the compound from two directions. One group of about ten SEALs will be "fast-roping" onto the roof; the other group unloads from an MH-60 landing inside the compound. Each methodically clears its area until the whole compound is secured.

As sometimes happens on such risky missions, a serious problem develops almost immediately. One of the MH-60s attempts to land inside the compound, but loses power and lands hard, sustaining considerable damage. The SEALs aboard move off to execute their mission while the two pilots and two gunners go to work removing weapons and comm gear, then finish up by rigging explosive charges to destroy the damaged aircraft.

A SEAL delivery vehicle team (SDV) fast-ropes to the topside of the *Los Angeles*–class fast attack submarine USS *Toledo* (SSN 769) in 2005; sometimes fast-roping is the only practical way to come aboard. *Journalist 3rd Class Davis J. Anderson, U.S. Navy*

On the OBL mission, SEALs fast-roped onto the roof of the bin Laden compound. All special operations forces practice fast-roping extensively. *Mass Communication Speacialist 2nd Class Sarah E. Bitter*

Fast-roping is often the fastest way to get a team from a helicopter to the objective. SEALs are no exception. *Photographer's Mate 2nd Class Michael J. Pusnik Jr., U.S. Navy*

About the same time, the other half of the SEAL team arrives in an MH-47 Chinook or two more Black Hawks, also flown by Night Stalkers. Landing in a field next to the compound, these SEALs quickly establish a perimeter defense and set up blocking positions on the nearby roads.

In the darkness, the assault teams methodically clear the compound, breaching gates and doors with explosives, moving snakelike through each area. When people are encountered in the compound, each is secured: head shots for men with weapons, flex-cuffs for women and children.

Breaching one entry point after another, the team clears the ground level and works toward the upper floors where they expect to find their target. Within a few minutes of arrival, they find Osama bin Laden. One of his wives blocks the door, and she is shot in the leg. When bin Laden moves toward the entry team, the SEAL on point places his PEQ-15 laser dot on bin Laden's head and fires, killing him instantly.

The SEAL team then quickly scoops up all the computer hard drives and memory devices, loading them on one of the helicopters. The inert body of bin Laden is also placed on one of the aircraft. While the assault is going down, the crew of the damaged helicopter prepares it for demolition with explosives, then detonates the charges.

At about 0210 hours local time, the SEAL assault teams and support personnel moved to their helicopters and were extracted. The valuables include a treasure-trove of computer memory and a cooling corpse. Sometime around 0300 hours Monday morning local time, the raiders crossed the border and were out of Pakistan. It was Sunday night in the United States when television stations began interrupting programming with the announcement. Spontaneous celebrations result. SEAL Team 6, along with the CIA, the Night Stalkers, and many anonymous people in the counter-terrorism business, had finally slain the architect of the 9/11 attack on America.

## Aftermath

In the weeks after the raid, it became clear that killing bin Laden changed a lot of the dynamics of the business of American counter-terror operations. For one thing, the skeptics who predicted that bin Laden would never be found and that the United States would give up and go home were proved wrong by the cooperative efforts of people from many agencies working together with a single goal. For another, the role of Pakistan as a dubious ally was clearly revealed when anybody suspected of supporting the raid—the owners of local safe houses, particularly—were arrested. Since the raid, terrorists worldwide must have the uncomfortable feeling that there is no safe harbor for them anywhere and that any of them can be hunted down and shot in the head, in their own bedroom, in the middle of the night, in the middle of a country that seems otherwise supportive of terrorist organizations.

For Americans, justice was all the sweeter for the long wait.

Soldiers with the 10th Special Forces Group ride in a Night Stalker CH-47 Chinook helicopter in March 2011. This is what the inside of the Chinook carrying SEALs and other mission personnel on the bin Laden mission looked like as the raid's helicopters sped through the night air over Pakistan to the bin Laden compound. *Tech Sergeant Manuel J. Martinez, U.S. Air Force*

## Tactics, Techniques, and Procedures of the Osama bin Laden Raid—Remotely Piloted Vehicles (RPVs) and More

Any observer of American special operations knows that a deliberate raid, one with time for planning and coordination, with the opposing force nearby and all systems available, would include RPVs. Some would provide video coverage and relay radio comms, while other RPVs observe critical locations on the battlefield. There are reports that SOCOM and JSOC have been amused about speculation that drones were used to provide security against Pakistani reaction forces and for other critical elements of the mission. This speculation is silly, because American special ops forces have been doing covert missions for fifty years. The basic planning methods are well known, the resources and the TTPs (tactics, techniques, and procedures) have been public knowledge for many years. Anyone interested in covert operations knows the capabilities of the drones, about our electronic warfare aircraft, and the use of covert data collection by operatives on the ground. These resources have been part of mission-planning doctrine for decades. So if you discover that Osama bin Laden is living quietly in a little town in Pakistan and his capture is your objective, the business pretty much falls into place.

SPECWARCOM and JSOC are holding back details of the raid. But based on standard SOF mission-planning TTPs and informed commentary from special operations insiders, here are some likely scenarios. SEAL Team 6 was selected for the mission early in the planning sequence. One reason was that they had just returned after a hundred-day deployment to Afghanistan and were in an "operator" mindset still fresh from combat operations. Another was that both SOCOM and JSOC commanders, Admiral Eric Olson

When clearing an objective such as the bin Laden compound, SEALs will move snakelike in a conga line to maintain contact with each other, particularly when in the dark using night observation devices. *U.S. Marine Corps*

and Vice Admiral William McRaven, were former SEALs, former commanders of ST6, and completely confident in ST6 capabilities.

## Security for the Isolation Phase of the Mission

While many media reports state that the SEALs conducted their preparations and rehearsals in Afghanistan, the story from inside the SOF community is a more radical but more reasonable scenario. Afghanistan is not secure for the rehearsals needed for a major raid. According to one retired operator, ST6 went into isolation on a military installation in the United States, built a detailed mockup of the compound, and then rehearsed the takedown in our own western desert—someplace in the Southwest. This makes perfect sense. Rehearsals would be conducted with far better security here than elsewhere. Even so, security was so tight that even the command group of ST6 was not briefed on the details. They reportedly learned the specifics only after the raid had been executed.

## Going into Isolation

Missions developed by American SOF units have many standardized procedures. Part of the planning is done by the really quiet members of the community, the staff intelligence specialists and planners. They will collect all information about the target—prisoner interrogation reports, "overhead" imagery from satellites, intercepts from aircraft, drones, radio and telephone, and ground surveillance both overt and covert. People looking like Pakistanis surely drove past the compound, taking photographs. People, also Pakistanis, surely bought or rented homes near the compound and set up surveillance systems to monitor the place around the clock. The intel specialists began quietly collecting every shred of data about the suspected location of OBL.

A U.S. Air Force MQ-1 Predator aircraft assigned to the 11th Reconnaissance Squadron, 432nd Air Expeditionary Wing, in flight over the desert. *Master Sgt. Scott Reed, U.S. Air Force*

U.S. Navy Aviation Boatswain's Mate Lowel A. Shorey III directs a U.S. Army CH-47G Chinook helicopter attached to the Night Stalkers of the 160th Special Operations Aviation Squadron performing deck landing qualifications aboard the amphibious transport dock ship USS *Juneau* (LPD 10) while under way on 4 February 2008. *Mass Communication Specialist 1st Class Michael D. Kennedy, U.S. Navy*

When the commander and the planning staff are confident, a team is selected, notified, and transported to an isolation compound. After a team goes into isolation, there is absolutely no contact from friends or family until the mission is executed or cancelled. The SEALs who conducted this mission disappeared for what was probably a month.

## Writing the Plan

Any plan begins with a massive collection of intelligence data of all types. The plan will be written by the team who will execute it, with support from the intel weenies, the commanders, and specialists. The team presents their plan to the commander in a "brief back." If the commander gives the plan a "go," something as risky as the OBL raid, with all its political consequences, will go up the chain of command to the NCA (National Command Authority) and ultimately to the guy called POTUS, the president of the United States.

SEALs train extensively using full-scale mockups. Here, SEALs practice room clearing, which was a vital part of the bin Laden mission. *Mass Communication Specialist 2nd Class Eddie Harrison, U.S. Navy*

Helicopters for the bin Laden raid were transported using C-17 Globemaster II cargo aircraft. The C-17 is big enough to carry any helicopters used by the army, including the special ops Black Hawks and Chinooks of the Night Stalkers. Pictured here is a conventional army Chinook being transported inside a C-17. *Staff Sergeant Stacy Fowler, U.S. Air Force*

When approved, details remain secret, but the standard mission procedures are common knowledge. It is standard procedure for the team to go into isolation early. The target will be duplicated as well as possible, the whole operation will be rehearsed endlessly, and potential disasters will be considered.

## Launching the Mission

According to rumors, the OBL mission actually launched from the United States. ST6 spent about a full month in isolation, working on the op order and rehearsing the execution. When the mission launched, the whole assault force—about forty SEALs, about twenty helicopter crewmen, at least four and possibly more helicopters, plus CIA folks, and a combat dog—were loaded onto U.S. Air Force C-17s and flown directly to a remote location near Abbottabad where the final phase of the raid would begin.

There is a standard procedure for deliberate raids on high-value targets. When army helicopters from the 160th SOAR are involved, they are embedded from the outset. So the MH-60s and their crews also went into isolation with ST6. And when the SEALs loaded onto the C-17s, the helicopters and crews were aboard.

One helicopter was probably a MH-47 Chinook with high-lift capacity. A C-17 can carry a Chinook or a Black Hawk plus the helicopter's crew. It can also carry all the SEALs and other raid personnel all on the gear at the same time.

This is just informed speculation, but it makes sense that around 28 April, a series of C-17s departed from a very secure airfield on a military base in the United States with the entire raid package—twenty-two raiders, another twenty or thirty for backup, a security element, a couple of interpreters, a combat dog and handler, helicopters, weapons, and the finest communication gear tax dollars can buy. With relief crews, the C-17s can fly direct from, say, Nellis Air Force Base to eastern Afghanistan in about seventeen hours. The aircraft would meet tankers to refuel three or four times en route.

Highly trained combat dogs, with a sense of smell that is forty times more sensitive than a human's, can provide an important force multiplier to a SEAL team. A combat dog and handler were part of the bin Laden mission. *Chief Mass Communication Specialist Stan Travioli, U.S. Navy*

If security is a critical factor, how can the commander and his staff make their transition from the C-17s to the helicopters without drawing unwanted attention? One way might be to avoid landing at any airfield at all. The C-17 is designed for rough, short, airfields that can be nothing more than a stretch of desert. It is possible to land far from any military facility and also quite possible to land in Pakistan, even closer to the objective. When planning very high risk raids in denied territory, closer is better and is a standard operating procedure.

Once on the ground, the helicopters were unloaded, the blades unfolded and pins replaced, and the crews prepped for flight. The SEALs and others on the team would "kit up," putting on their tactical vests, checking weapons, checking NODs, checking radios. This might have happened in the dark, sometime after 1900 hours or so local time. Team leaders would have inspected their men and all would have been inside their helicopters by 2400.

## A Stealthy Insertion

Speculation surrounds the Abbottabad raid. How could you fly helicopters into essentially "denied" territory without being engaged by Pakistani defenses? Do you disguise the helicopters with Pakistani colors? Can you "spoof" the transponder codes used to identify aircraft, mimicking Pakistani military helicopters? Can you be invisible to radar by structural modifications to the helicopter blades and airframe?

The MH-60 helicopters used for the assault each cost about $15 million, three times the cost of a conventional UH-60 Black Hawk. Some of that extra $10 million went into navigation and communications systems, but some also went to modify the rotors. "Those things are deathly quiet," one SOF operator says.

Night Stalker pilots are masters of flying "contour" at night, without lights. This is another way to become invisible to both radar and ground observers. NOE, or "nap of the earth" flight is wonderfully exciting. The sensation of speed at 100 miles per hour and 100 feet above ground is much greater than 1,000 miles per hour at 10,000 feet. Flying NOE is dangerous in daytime and more so at night, but it is the best way to fly behind enemy lines.

Chapter 10

# TODAY'S SEALs—IN THEIR OWN WORDS

Since the first Gulf War, threats to global security have changed tremendously. Some of these changes predate the 9/11 attacks, some are independent of them. Regardless of the reasons, all members of American special operations forces are in high demand today. SEALs and other members of the special operations community are busy today in such numbers and in such important roles that operations in Afghanistan have been called the "special operations war." Navy SEALs are cooperating with some previously unlikely forces in operations that were unthinkable a decade or so ago. Not only are SEALs working alongside Green Berets and Rangers, they've developed a close and affectionate partnership with the Polish special forces teams, *Grupa Reagowania Operacyjno Mobilnego* (GROM; operational mobile response group). GROM, established in 1991, has demonstrated great proficiency in conducting small unit direct action missions.

Among the many unsung heroes of SEAL missions today are some very tough and brave navy sailors—the members of the explosive ordnance disposal (EOD) units. They are not SEALs and not part of NSW, but these personnel support many demanding NSW missions. With the prevalence of bombs and booby traps in the current area of operations, the role of the EOD specialists has become essential. Their training is more specialized than that of SEALs, but members of this small community are as physically tough as the SEALs they support. You will find EOD personnel and their specialized gear on vessel boardings, raids, and operations where their skills are needed.

The SEALs also continue to work with the "special boat guys," the special warfare combatant crewmembers (SWCC). The SWCC have for years been conducting maritime interdiction operations in the Persian Gulf area to enforce sanctions imposed during the Gulf War. After 9/11, they conducted operations to prevent al Qaeda and Taliban members from escaping the area in merchant ships and fishing boats. Before the official start of Operation Iraqi Freedom, SEALs and SWCC were key assets employed to secure the southern oil infrastructures of the Al-Faw peninsula and the offshore gas and oil terminals. The ability of the United States to secure these facilities prevented ecological disaster and saved precious financial resources for the people of Iraq. SWCC were also involved in clearing the Khor Al Abdullah and Khor Az Zubayar waterways that enabled the first humanitarian aid to be delivered to the vital port city of Umm Qasr. SWCC and members of the SEAL delivery vehicle teams have also been put to work in the tactical operations centers (TOCs), where the commanders of all special operations forces command and control their forces. Their background in the planning and conduct of special operations missions makes them especially valuable as planners and communicators with SEAL and other teams deployed "downrange."

## Buried Treasure at Zhawar Kili

In January 2002, a SEAL team supported by a platoon of marines was inserted by helicopter into the mountainous region of Zhawar Kili, an area in eastern Afghanistan near the border with Pakistan. The mission was a reconnaissance of a location known to support Taliban forces and was scheduled to last twelve hours. Once on the ground, however, the SEALs discovered an immense network of about seventy underground storage facilities stuffed with many tons of

During a Sensitive Site Exploitation (SSE) mission, SEALs explore the entrance to one of seventy caves they discovered in Zhawar Kili area. Used by al Qaeda and Taliban forces, the caves and other above-ground complexes were subsequently destroyed either by navy Explosive Ordnance Disposal (EOD) personnel or through air strikes called in by the SEALs. *U.S. Navy.*

explosives and ammunition. This cave complex had been reinforced with concrete, steel beams, and bricks. The SEALs and marines found classrooms, offices, and cooking and sleeping quarters sufficient for a large force and virtually invisible from the air.

The SEALs and marines were lightly supplied with MREs and water but not equipped for extended operations in the high, cold mountains. They stayed anyway and got to work destroying the enemy supplies. Although they had some blasting materials of their own, there were far too many bunkers to be blown with the available supply.

An abandoned village was found nearby and used as a temporary base. It took two days, but then marine helicopters flew in water, sleeping bags, additional MREs, and other gear while the demo specialists got to work. The contents of the bunkers was inventoried, then destroyed. Navy aircraft delivered precision-guided bombs with delayed fuses into the mouths of the caves, causing secondary explosions of the enemy munitions which shook the whole valley.

## "I Had a Blast"—ABH1 Neil Roberts, Navy SEAL

This is a very busy time for members of the NSW community, a time of intense training and deployments, of new responsibilities and missions. These are largely invisible to the American public by the design of NSW, except when a SEAL or SWCC is killed. Only then is a glimpse inside real world operations possible.

SEALs lay down covering fire as part of an extraction exercise during a July 2010 capabilities demonstration at Joint Expeditionary Base Little Creek, Virginia. *U.S. Navy photo by Chief Mass Communication Specialist Stan Travioli*

ABH1 Neil Roberts died on a mission somewhat typical of NSW operations in this new kind of war. Roberts was a career SEAL, a big, cheerful guy from a big, cheerful family. He loved the navy and especially the SEALs.

In early March 2002, Roberts was aboard one of two army CH-47 Chinook helicopters participating in Operation Anaconda in the Shah-i-Kot valley south of Kabul. This area was a major stronghold for Taliban and al Qaeda forces, and Anaconda was designed to destroy these enemy forces. In the past, SEALs would have been tasked with a small mission away from the main operation, but during Anaconda, Roberts and his team were fighting alongside Rangers and Green Berets, being transported by army helicopter, and cooperating with Afghan Mujahadeen freedom fighters. Intel reports suggested that about 250 enemy personnel were in the area, and that they would try to escape toward nearby Pakistan if pushed. Major General Frank Hagenbeck, the task force commander, sent his forces into positions at three critical terrain features—battle positions Heather, Ginger, and Eve.

Their landing zone was deep inside Afghanistan, hundreds of miles from any beach, on a hill mass indicated on the maps by the code name "Whale". This site was one of the few suitable places for the insertion of forces by helicopter, and enemy forces accordingly emplaced defenders nearby for just such an assault.

Roberts was standing on the ramp of his Chinook, manning an M249 SAW (squad automatic weapon), a machine gun that fires the same 5.56mm round used by the M16 and M4 carbine. As his helicopter flared before landing, nose high and speed rapidly diminishing, the enemy defenders cut loose with all available weapons, AK-47s and RPGs predominating. The helicopter was hit by numerous rounds, pitched

SEALs discover a cache of munitions and weapons while conducting a sensitive site exploitation (SSE) mission in the Jaji mountains of Afghanistan on 12 February 2002. *U.S. Navy photo by Photographer's Mate 1st Class Tim Turner*

nose up, and thrashed violently as the pilots aborted the landing and struggled out of the kill zone.

At some point during this barrage, the two machine gunners on the ramp were ejected from the aircraft. One, an army crewman, was secured by his gunner's belt to a tie-down on the aircraft floor and was hauled back aboard. Roberts was unsecured and dropped between five and ten feet to the ground without his M249.

In the confusion of the moment, with the Chinook crew struggling for their lives, Roberts would have to wait for attention, but not for long. The dying helicopter crash-landed nearby, and the crew hastily mounted a rescue mission.

An unmanned reconnaissance drone aircraft over the scene transmitted video back to Bagram Airbase and recorded what happened next. Despite the tumble from the helicopter, Roberts kept his wits. He activated his rescue beacon, then crawled to a terrain position offering cover and

U.S. Navy SEALs along with their Afghan partner forces conduct a tactical ground movement during a four-day clearing operation of the lower Char Chineh Valley in Uruzgan province, Afghanistan, in late June 2011. They conducted the joint operation to deny insurgents sanctuary and staging areas in order to secure the surrounding military bases and checkpoints. *U.S. Army photo by Staff Sergeant Kaily Brown*

concealment from the small arms fire directed at him. He fought back with his pistol and grenades. According to reports, he was seen assaulting a machine gun position. He continued to fight for about an hour, killing enemy soldiers with his pistol, sometimes at very close range, one SEAL against an estimated sixty Taliban soldiers.

The drone's video camera apparently saw Roberts hit by enemy fire several times, but he continued to fight. Out of grenades and pistol magazines, Roberts finally collapses and dies.

Any sense of victory felt by the Taliban forces on the Whale were short-lived. The rescue force arrived about two hours later—helicopters loaded with air force para-rescuemen, Rangers, and SEALs. These helicopters also encountered ground fire but were not taken by surprise. The rescue force was too late to save Roberts, but they were in time to slay the enemy on the ridge. Fighting was, as they say, intense, and few prisoners were taken. Six Americans were killed and many others wounded.

ABH1 Neil Roberts was posthumously awarded the Silver Star, Bronze Star with Valor designation, and the Purple Heart. His wife Patty released parts of a letter he left to be opened in the event of his death. In part, it read:

"Although I sacrificed personal freedom and many other things, I got just as much as I gave. My time in the Teams was special. For all the times I was cold, wet, tired, sore, scared, hungry and angry, I had a blast. All the times spent in the company of my teammates was when I felt the closest to the men I had the privilege to work with. I loved being a SEAL. If I died doing something for the Teams, then I died doing what made me happy. Very few people have the luxury of that."

A Navy SEAL shares an MRE (meal, ready to eat) with local Afghani children on 24 January 2002. The SEALs were in the area during a a sensitive site exploitation (SSE) mission to find suspected al Qaeda and Taliban. *U.S. Navy photo by Photographer's Mate 1st Class Tim Turner*

A SEAL platoon hangs beneath an HH-60H Seahawk helicopter assigned to the "Red Wolves" of Helicopter Sea Combat Squadron 84 during a July 2010 special patrol insertion/extraction (SPIE) demonstration at Joint Expeditionary Base Little Creek–Fort Story, Virginia—*Department of Defense photo by Mass Communication Specialist 2nd Class Matt Daniels.*

## Capturing the Taliban

Members of SEAL Team 5 executed over three hundred combat operations during one six-month deployment in 2003, an "op tempo" that sounds extreme but is probably typical for NSW units in the "sandbox." These operations have been hugely successful because SEALs have been able to develop their own intel—hopping on a helicopter, overflying a target location, taking photos—and then launching a mission based on this fresh, but perishable, information sometimes within a couple of hours of notification.

That tremendous agility paid off with the capture of enemy commanders like the Taliban's Mullah Khairullah Kahirkhawa in Paktika Province, Afghanistan, in February 2003. A Predator drone aircraft transmitted video showing the mullah leaving a building under surveillance. Danish special operations personnel and SEALs quickly loaded onto huge MH-53 Pave Low helicopters and were in the air in fifteen minutes. Ninety minutes after he left the building, the mullah was cuffed and captured.

SEALs are doing so many of these quick-reaction missions that the old planning cycle's meticulous preparation has sometimes been exchanged for a very rapid collection and mission design process. SEALs and the other personnel on these operations sometimes don't know much about the mission until they are briefed while the helicopters are en route to the target. While that trades some of the virtues of a careful plan for the virtues of fresh information, the results seem to validate the method in today's real-world direct-action missions.

## "The World's Best Waterborne Warriors"—CPO Steven Bronson, Boat Guy (USN Retired)

"It bothers me that, whenever the news media shows naval special warfare boats in action, the caption normally calls them something like 'the SEAL boats.' Well, they are not the SEALs' boats; they are special warfare combatant craft and the guys who run them are professionals within the NSW community with their own independent missions and qualifications. Yes, we deliver SEAL squads to their objectives, but we do a lot of other things at the same time, often without any SEALs aboard.

"Captain Ray Smith drove this change after Desert Storm [Ray Smith would shortly become Rear Admiral Ray Smith]. He was dismayed at the loss of his combat-qualified and combat-experienced special boat sailors—these sailors were hard-working combat sailors, but almost immediately after Desert Storm, some ninety percent of those same sailors were transferred back to the fleet. Rear Admiral Ray Smith worked with Captain Tom 'The Hulk' Richards, commanding officer of Naval Special Warfare Center and initiated what would become the SWCC course, which graduates some of the world's best waterborne warriors. SWCC sailors are volunteers who choose to attend a selection course and a qualification course and finally receive orders to a special boat team.

"I was proud to be one of the original eight sailors who were assigned to develop, design, implement, and train sailors in the SWCC course. I was eventually assigned as the program manager of SWCC for almost three years. It was truly an intense training program, which has continued to improve to where they are today.

"The Zodiac F470 is still the boat of choice for a mission where you need to get some guys to the beach and into the hinterland. You can get eight combat-equipped men or up to about three thousand pounds of cargo and run it all onto a beach, then hide the boat, do your mission ashore, and exfiltrate undetected. You can drive two of them right up on the back of a Mark Five, and that makes it a unique platform for missions where multiple boats are required. The F470 is the operator's best friend when you need to put a small unit ashore covertly.

"The eleven-meter RIB is getting a tremendous workout for the offshore missions today. It is extremely fast and stable, has special seats that accommodate an eight-man squad of SEALs, and can be crewed by five to eight SWCC boat guys. When set up for a wartime load-out, these boats mount weapons fore and aft, with a crewman on each, plus a communicator, a navigator, and the guy who is driving the boat. This boat fits inside some military aircraft and can be delivered quickly to anywhere they are needed.

"We're all pleased with the performance of our fairly new riverine assault craft, the SOC-R. Although it isn't discussed much in public, we've got a lot of special operations forces guys doing counter-narcotics missions in Central and South America, and these boats are natural choices for patrolling the rivers and estuaries of these regions."

## The New Boats

The broad, heavily armed SOC-R, which can carry a whole squad, is a thirty-three-foot boat with tremendous speed and agility, but it is not the only vehicle currently available to the SEALs and SWCC.

Two U.S. Navy SEALs navigate through murky waters during a Combat Swimmer Training dive. Although all of America's special operations forces receive scuba and other underwater training, SEALs are the world's foremost combat swimmers. *U.S. Navy photo by Senior Chief Mass Communication Specialist Andrew McKaskle*

Special Warfare Combatant-craft Crewmen (SWCC) transit the Salt River in northern Kentucky during pre-deployment, live-fire training. SWCCs attached to Special Boat Team (SBT) 22 based in Stennis, Mississippi, employ the Special Operations Craft Riverine (SOC-R), which is specifically designed for the clandestine insertion and extraction of U.S. Navy SEALs and other special operations forces along shallow waterways and open water environments. *U.S. Navy photo by Mass Communication Specialist 2nd Class Jayme Pastoric*

Since 1992, NSW forces have been using the Mk V extensively and successfully. The eighty-one-foot Mk Vs don't have the ability to operate independently for extended periods, but they are very fast, efficient, and capable. They've worked out well during combat operations in the Gulf, and both SEALs and the boat guys are generally pleased with them.

"The question," CPO Steven Bronson (USN ret.) says, "was why should SWCC use a 175-foot boat and a crew of twenty-five men when they can send two Mk Vs with a combined crew of ten men to do the same basic real-world mission? It just made much more sense to go with the Mark Vs."

In 1993, the first of fourteen *Cyclone*-class coastal patrol crafts (PCs) was commissioned to replace the aging sixty-five-foot Mk III patrol boats operated by NSW's special boat units. The primary mission of the PC was to conduct coastal patrol, surveillance, and interdiction operations in support of NSW. The boats turned out to be excellent vessels and were well received by theatre commanders. Subsequent budgetary concerns resulted in the PCs being slated for decommissioning; however, in the wake of the 9/11 terrorist attacks, thirteen of the fourteen ships were turned over to the navy and employed overseas and in support of Operation Noble Eagle. The first PC commissioned, USS *Cyclone*, was transferred to the U.S. Coast Guard in 2000 and then transferred to the Philippines as BRP *Mariano Alvarez* (PS 38) in March 2004.

## "The Weak Die Young"—Anonymous Former SEAL

"Being in the special operations community now, especially in the SEALs, is a very good experience. SEAL teams are

## Plain Vanilla and Extra Crunchy—Life in the Teams Today

SEALs and guys on the Special Boat teams will tell you that there are essentially two kinds of SEAL teams today, the "plain vanilla" type and the one very special team, the one with the extra nuts and toppings. The special team is ST6, the plain vanilla teams are all the rest. "All the teams are well funded today," one member of the community says, "but SEAL Team Six has money for almost anything they ask for."

### Wish You Were Here

Ten years of sustained combat operations have refined SPECWARCOM's business model in many ways. For one thing, when a team deploys now (2011), the whole unit packs up and heads downrange—the commander, the entire staff, the supply and support people, and the team members too. In the past, a lot of the command group stayed home and worked somewhat normal duty days, went to the bar after work, went home on weekends. No more—the whole unit deploys as a package deal. The SEALs have always been used to that, but for some of the support personnel and administrative staff, a "headspace" adjustment has been required.

### Riggers

Among every unit that deploys are several important men who operate sewing machines instead of machine guns: the riggers. These guys are always available to customize uniforms and web gear, and they can fabricate bags, containers, slings, and anything else you might need to complete a mission. If you look closely at the shirts most SEALs wear, you will see small pockets on the upper sleeve area; these are added by the riggers under the direction of individual SEALs and SBS crewmen. An entire industry has evolved from the riggers and their custom sewing skills, the most successful of which is Blackhawk Industries, a company started by ex-SEAL Mike Noell to build bags and vests for tactical operators. Today there are dozens of companies like Blackhawk selling specialized gear for SEALs and other operators, designs that have evolved from the custom tailoring work of NSW riggers.

### Guns and Gear

SEALs typically seem to have the most flexibility and choice of gear and weapons of all the units in the American armed forces. If anybody is going to have the option of acquiring a new rifle or radio, it's going to be the guys on the teams and especially the guys on SEAL Team Six.

Among those exotic rifles has been the SOF Combat Assault Rifle, or SCAR-H Mk 17 shown in the photograph on this page, a modular weapon built by FN Herstal and adopted by USSOCOM in 2003. Intended as an upgrade for the venerable M16/M4 platform in use since the mid-1960s, the 5.56mm version, the Mk 16 SCAR, was withdrawn from issue while the heavier 7.62mm SCAR-H and a sniper variant, the Mk 20, are currently being issued. This SEAL's Mk 17 is tricked out with a PEQ-15 target pointer and illuminator, fore-end grip and integral switch for the pointer, scope, and a bipod. The PEQ-15 is the latest generation (at

A U.S. Navy SEAL takes up a defensive position in a village in northern Zabul province, Afghanistan. *U.S. Navy photo by Chief Mass Communication Specialist Jeremy L. Wood*

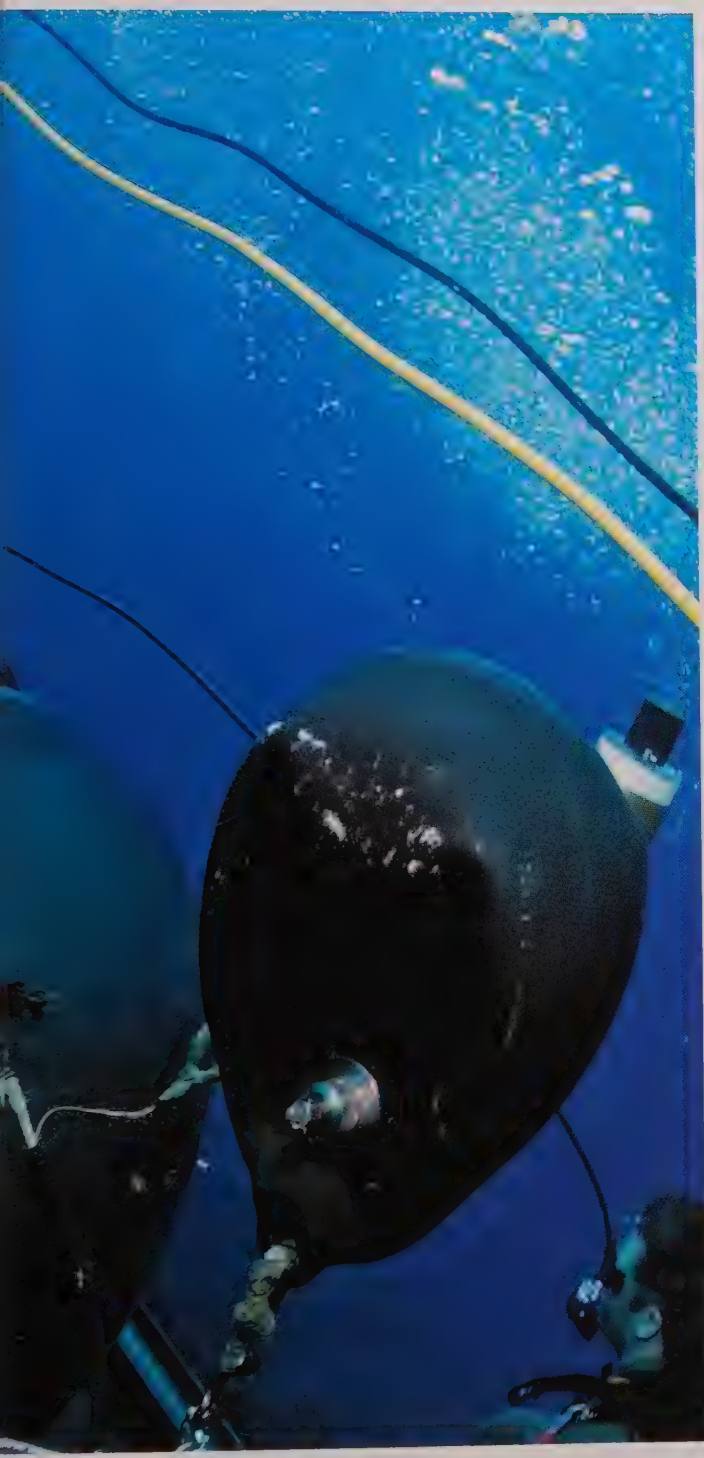
this writing) of a whole family of night-fighting high-technology tools. It can provide broad-beam, overall illumination like a flashlight and a precise laser spot-targeting marker, both visible only to those wearing NODs (night observation devices).

One career senior petty officer says about SEALs and their gear, "There is a tremendous emphasis on fine-tuning everything a guy carries on an op. Weight is a huge factor and every ounce is considered. And although there's usually money for any kind of comm gear and beacons and all the other high-tech stuff, SEALs will generally prefer equipment that is powered by AA batteries if it's available. You can buy AA batteries anyplace in the world, from North Korea to any back street in Botswana, and that can be really important for a team on an operation."

## Reach Out and Touch Somebody

Until fairly recently, the role of snipers throughout the American armed forces tended to emphasize covert observation from a distance with actual engagement of targets with their rifles being a secondary and somewhat rare mission. That has been changing radically in the past few years, and now snipers are now doing more killing, man for man, than is anybody else. SEAL snipers in particular have been busy with their rifles, sometimes providing support for U.S. Army and Marine Corps conventional infantry units far from the ocean.

The tools of the sniper's trade have improved along with the importance of the mission. SEAL snipers at this writing are using a wide variety of exotic and expensive sniper rifles—the SR-25, the SCAR-H, CheyTac, and others, usually with very powerful optics. While the army and Marine Corps snipers are still using rifles built around the 7.62mm NATO cartridge, good to about 800 meters on a normal day and 1,200 meters if you're really lucky, SEAL snipers are using weapons built around much heavier cartridges—.300 Winchester Magnum, .338 Lapuua, .375 CheyTac, and .408 Cheytac, all of which are effective to 1,500 meters and beyond. SEALs are also getting some extremely capable and expensive ballistic computer systems that enhance the chance of a first-round hit at extreme range.



Members of SEAL Delivery Vehicle Team Two (SDVT-2) prepare to launch one of the team's SEAL Delivery Vehicles (SDV) from the back of the Los Angeles–class attack submarine USS *Philadelphia* (SSN 690) on a training exercise. The SDVs are used to carry Navy SEALs from a submerged submarine to enemy targets while staying underwater and undetected. SDVT-2 is stationed at Naval Amphibious Base Little Creek, Virginia, and conducts operations throughout the Atlantic, Southern, and European command areas of responsibility. A contract for an advanced SEAL Delivery System (ASDS) was awarded in 1994. The ASDS could transport up to sixteen SEALs in a dry chamber, allowing much longer underwater missions than possible with the SDV. A total of six ASDSs were to be built. To date only one ASDS has been built, and it suffered major damage during a fire in November 2008, which Special Operations Command has chosen not to repair due to funding constraints. Technical and reliability issues with ASDS-1 and 400 percent cost overrun have caused the demise of this program for the time being. *U.S. Navy photo by Chief Photographer's Mate Andrew McKaskle*

doing a lot of great missions—interception of suspect vessels at sea, disrupting enemy supply lines, reconnaissance of enemy personnel, and even snatch-and-grab captures of enemy commanders. SEALs are protecting the Iraqi prime minister and other missions of great responsibility.

"Being in a small unit like a SEAL team, you forge extremely strong bonds with the guys. In any group where you have sixteen or so AAA-personalities, there are going to be strong opinions and lots of competition. Once in a while you might bump heads with somebody else; if you're going to be on a SEAL team, you need to have very thick skin in addition to all the other qualifications. Within the platoon or squad, everything you do will be subject to critique and criticism and it pays to take it all cheerfully. We play by 'big boy' rules on the teams, and if you do something stupid, you're expected to own up to it right away.

"The most-junior member of the platoon is normally designated the 'beermeister,' and it is his job to make a record of each dumb stunt anybody makes during an exercise or operation. Later, at an appropriate time, each one of those mistakes will cost the SEAL who made it a case of beer. The result is that the whole unit has a good time but at the same time the mistake is recalled to the embarrassment of the SEAL who made it and who will be expected to avoid doing it again. Anybody who can't take criticism from his teammates will get criticized for that too—it is considered a weakness. The weak die young on a SEAL team."

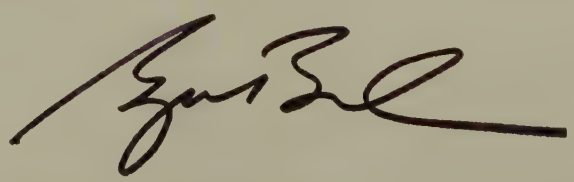
The President of the United States in the name of The Congress takes pride in presenting the MEDAL OF HONOR posthumously to

LIEUTENANT MICHAEL P. MURPHY
UNITED STATES NAVY

for service as set forth in the following

CITATION:

For conspicuous gallantry and intrepidity at the risk of his life above and beyond the call of duty as the Leader of a Special Reconnaissance Element with Naval Special Warfare Task Unit AFGHANISTAN on 27 and 28 June 2005. While leading a mission to locate a high-level anti-coalition militia leader, Lieutenant Murphy demonstrated extraordinary heroism in the face of grave danger in the vicinity of Asadabad, Konar Province, Afghanistan. On 28 June 2005, operating in an extremely rugged enemy-controlled area, Lieutenant Murphy's team was discovered by anti-coalition militia sympathizers, who revealed their position to Taliban fighters. As a result, between 30 and 40 enemy fighters besieged his four-member team. Demonstrating exceptional resolve, Lieutenant Murphy valiantly led his men in engaging the large enemy force. The ensuing fierce firefight resulted in numerous enemy casualties, as well as the wounding of all four members of the team. Ignoring his own wounds and demonstrating exceptional composure, Lieutenant Murphy continued to lead and encourage his men. When the primary communicator fell mortally wounded, Lieutenant Murphy repeatedly attempted to call for assistance for his beleaguered teammates. Realizing the impossibility of communicating in the extreme terrain, and in the face of almost certain death, he fought his way into open terrain to gain a better position to transmit a call. This deliberate, heroic act deprived him of cover, exposing him to direct enemy fire. Finally achieving contact with his headquarters, Lieutenant Murphy maintained his exposed position while he provided his location and requested immediate support for his team. In his final act of bravery, he continued to engage the enemy until he was mortally wounded, gallantly giving his life for his country and for the cause of freedom. By his selfless leadership, courageous actions, and extraordinary devotion to duty, Lieutenant Murphy reflected great credit upon himself and upheld the highest traditions of the United States Naval Service.



*U.S. Navy*

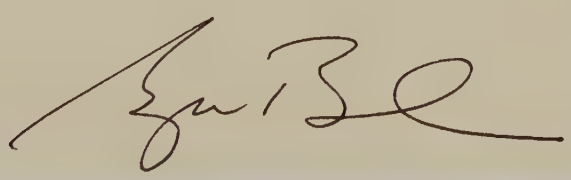
The President of the United States in the name of The Congress takes pride in presenting the MEDAL OF HONOR posthumously to

MASTER-AT-ARMS SECOND CLASS (SEA, AIR AND LAND)
MICHAEL A. MONSOOR
UNITED STATES NAVY

for service as set forth in the following

CITATION:

For conspicuous gallantry and intrepidity at the risk of his life above and beyond the call of duty while serving as Automatic Weapons Gunner for Naval Special Warfare Task Group Arabian Peninsula, in support of Operation IRAQI FREEDOM on 29 September 2006. As a member of a combined SEAL and Iraqi Army sniper overwatch element, tasked with providing early warning and stand-off protection from a rooftop in an insurgent-held sector of Ar Ramadi, Iraq, Petty Officer Monsoor distinguished himself by his exceptional bravery in the face of grave danger. In the early morning, insurgents prepared to execute a coordinated attack by reconnoitering the area around the element's position. Element snipers thwarted the enemy's initial attempt by eliminating two insurgents. The enemy continued to assault the element, engaging them with a rocket-propelled grenade and small arms fire. As enemy activity increased, Petty Officer Monsoor took position with his machine gun between two teammates on an outcropping of the roof. While the SEALs vigilantly watched for enemy activity, an insurgent threw a hand grenade from an unseen location, which bounced off Petty Officer Monsoor's chest and landed in front of him. Although only he could have escaped the blast, Petty Officer Monsoor chose instead to protect his teammates. Instantly and without regard for his own safety, he threw himself onto the grenade to absorb the force of the explosion with his body, saving the lives of his two teammates. By his undaunted courage, fighting spirit, and unwavering devotion to duty in the face of certain death, Petty Officer Monsoor gallantly gave his life for his country, thereby reflecting great credit upon himself and upholding the highest traditions of the United States Naval Service.



*U.S. Navy*

# DELTA

# Preface

This is another type of war, new in its intensity, ancient in its origins—war by guerrillas, subversive, insurgents, assassins . . . seeking victory by eroding and exhausting the enemy instead of engaging him.
—President John F. Kennedy, 1962

Since the first edition of *DELTA —America's Elite Counterterrorist Force* appeared, we have witnessed a steady rise in political and religious violence—narco-terrorism, wars and chaos in Afghanistan and Chechnya, and the tragedy of September 11, 2001. But the most significant change has been the potential ability of well-financed international terrorists to inflict immense human suffering and dislocations of society if they are not destroyed or kept on the defensive.

The ghastly events of September 11 shocked not only Americans but also the world. Shock, however, is not the same as disapproval. Many in the Middle East were overjoyed that such blows were struck against "The Great Satan," while others in Europe and elsewhere took a more subtle satisfaction in America's comeuppance.

How could this happen to the world's superpower? As President Kennedy stated in 1962, this is an ancient form of warfare—with very modern weapons—and has its roots in the period after World War II and the Korean War when a direct confrontation with the United States became less attractive to the Soviet Union and China. These countries increasingly turned to "wars of national liberation" as a means of expanding their influence while minimizing their own risk.

The success of Ho Chi Minh's revolution in 1954 and Fidel Castro's Cuban revolution in 1959 and the rising tide of insurgencies around the globe made it clear to the newly elected President Kennedy that the focus of communist expansionism continued to spread within the Third World. Kennedy firmly believed that the communist's ominous Cuban foothold in the Western Hemisphere could be countered by a program aimed at stimulating peaceful evolution instead of violent revolution. His response to the communists' challenge was the Alliance for Progress.

The Alliance for Progress was a serious effort to promote stability in Latin America through political reform and economic and social development, and it served as a model for similar U.S. commitments in other less-developed regions. Embryonic communist insurgencies threatened this evolutionary process, and Kennedy moved quickly to blunt their threats by devising and implementing a doctrine of counterrevolutionary warfare. More than 40 years later, the descendants of his elite, unconventional warriors continue to assist dozens of potential or fledgling democracies while specifically tasked, direct-action arms of the Army, Navy, and Air Force stand ready to fight an insidious byproduct of Third World instability and the end of the Cold War—international terrorism.

In the years following the Iran hostage crisis and the disaster at Desert I, a great deal has been written on the 1st Special Forces Operational Detachment– DELTA. Most of the focus has been on the origins of the failed rescue attempt, the major players, technical problems, and in some cases, the strategic and tactical leadership of the units involved. However, the guts and backbone of DELTA is the individual trooper.

Each individual who makes up DELTA displays personal initiative and works well as part of a team. They are mature, confident in themselves, their teammates, and their unit, and they are unquestioned experts in their craft. These qualities are the essence of DELTA.

This story examines counterterrorism (CT) training and operations from the viewpoint of the elite special operations team members who wade into the dirty business of counterterrorism to protect U.S. lives and interests.

In a free society, there is immense pressure on special operations units. Because of the clandestine nature of DELTA's mission, the full story of this extraordinary and sophisticated unit cannot be told, regardless of how important its unique capabilities and successes are to the ongoing war against international terrorism.

"Need to know" is the term most often used in the business of intelligence—especially clandestine and covert operations. In the decades before the September 11 attacks, this security requirement and DELTA's necessarily low visibility made it a potential target for budget cutters searching for a "quick fix." Such actions would have been disastrous. However, the events

of September 11, 2001, firmly established America's counterterrorist forces as a requirement for the nation's survival.

Those connected with any aspect of the war on terrorism *must* use the same terms and have a fundamental understanding of their meanings if they are to operate effectively. Problems arise when certain words are mistakenly used interchangeably. An excellent example is the misuse of *antiterrorism* and *counterterrorism*. Antiterrorism (AT) operations are those actions and activities taken to keep a location or people from becoming a target for terrorist activities, such as airport screening and security guards stationed at critical areas. Whereas, counterterrorist (CT) operations—hostage rescue, thwarting attacks, attacking terrorist groups—take place after the terrorists have initiated activities and actions for an attack or carried out an attack.

The material presented here is based on the research and experiences of the authors and does not represent the positions or policies of any official, agency, or department of the United States government, or any other agency or government. Material contained herein was derived from unclassified publications and sources and is intended to neither confirm nor deny, officially or unofficially, the views of any government or agency.

Unaccredited photos were taken by U.S. armed forces personnel and are in the public domain. The names of DELTA troopers are classified and, unless otherwise noted, all names given for soldiers below the rank of colonel are pseudonyms.

Chapter 1

# OUT OF THE DESERT

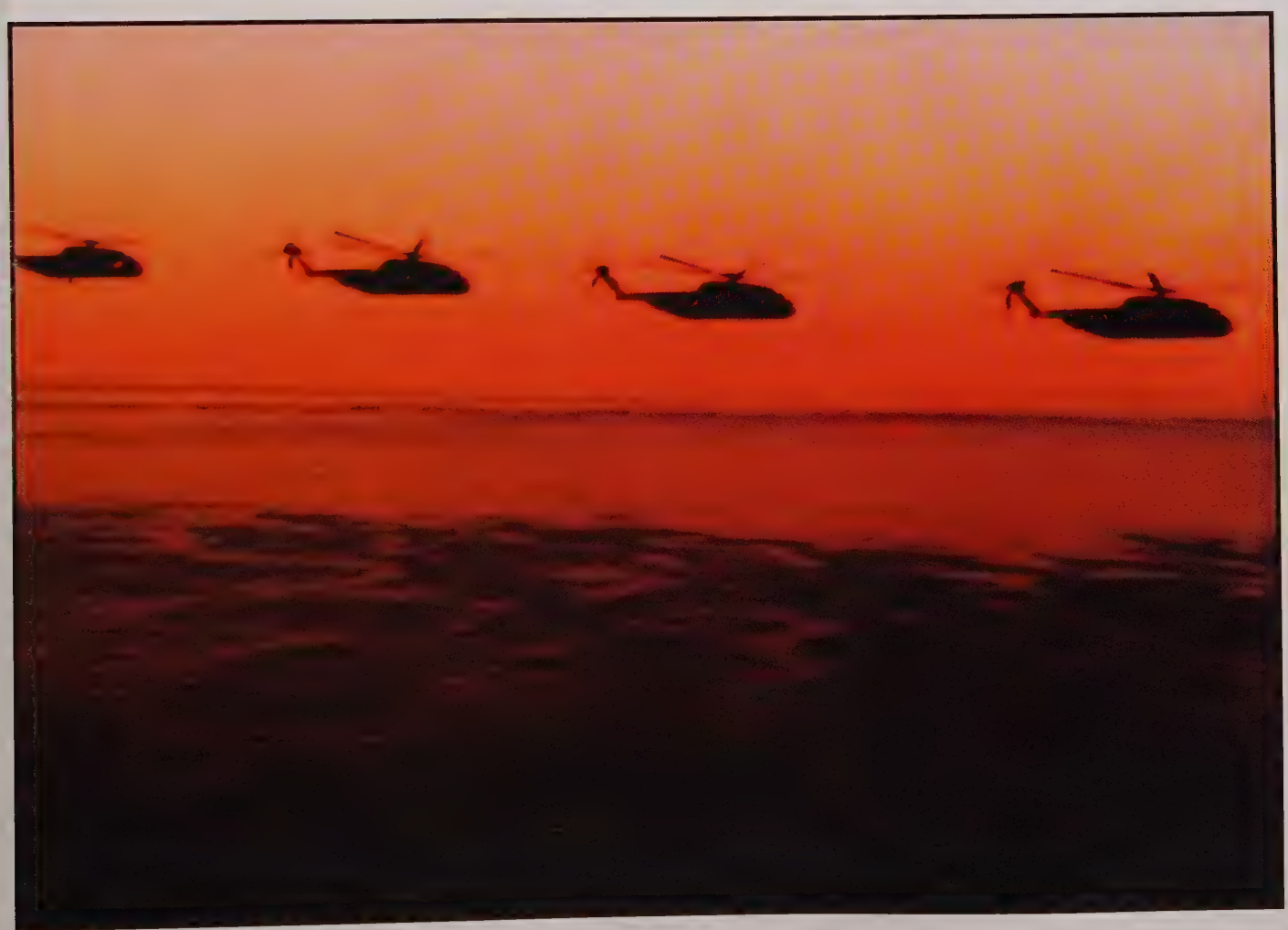
Sea Stallions receive preflight preparations on the deck of the USS *Nimitz*. The RH-53Ds had been freshly painted to mimic the look of Iranian helicopters and carried green, white, and red Iranian identification roundels to further confuse prying eyes.

## Out of the Desert

The takeoff had to go right the first time. There would be no second chance. As the last item on the preflight list was checked off, the pilot revved up the EC-130E's Allison turboprops to gain maximum power. Releasing the already-straining brakes and pushing the throttles to the firewall, the pilot nursed his aircraft slowly forward out of the jumbled mass of wheel ruts furrowed deeply into the Iranian desert. The straining engines created a mini sandstorm that all but obliterated the ghastly funeral pyre they were leaving behind. Resembling some prehistoric bird of prey, the dark Hercules sluggishly lifted away from the makeshift desert runway and the disaster that Operation *Eagle Claw* had become.

This aircraft was one of the last special operations birds leaving Iran after the aborted rescue attempt to free American hostages in Teheran. Ayatollah Khomeini's Revolutionary Guards had held their 53 prisoners in the captured U.S. Embassy compound for nearly six months, and the half-dozen Hercules had been slated to play a key role in rescuing them. Now, as five heavily loaded aircraft flew into the early morning darkness, an EC-130E tanker and an RH-53D Sea Stallion helicopter lay blazing in the desert. Through the swirling sand, passengers could clearly see what they had never believed possible: failure. Despite well-laid plans, the team's efforts ended in an inferno of exploding ammunition and twisted, burning aircraft.

What happened at the refuel site code-named *Desert I* has been argued about and even embellished in a Hollywood adventure film, but the basic facts remain the same. The six special operations aircraft that penetrated Iran on the night of



RH-53D Sea Stallions from the USS *Nimitz* practice low-level formation flying before the attempted rescue of American hostages in Iran.

RH-53D Sea Stallions on the aft hangar bay of the USS *Nimitz* before launch.

A Sea Stallion's burned-out hulk at *Desert I. Wide World Photos*

Revolutionary Guard checkpoints in Teheran surreptitiously photographed by Army personnel. They are armed with a variety of 7.62mm Heckler & Koch G3 rifles manufactured in Iran under a license obtained from the West German firm. (A) A Revolutionary Guard is carrying several weapons to comrades up the street while (B) the mountains surrounding Teheran are clearly visible.

April 24–25, 1980, were configured either as tankers to refuel the Sea Stallion helicopters or as transports to bring in the assault teams and their ground support. After reaching the site, the mission was scrubbed, and the force had to prepare for exfiltration.

The decision to abort was made after three of the eight Sea Stallions either failed to reach *Desert I* or could not proceed due to mechanical difficulties. Not enough helicopters were available to carry out the mission, so there was nothing for the rotary and fixed-wing aircraft to do but return to their separate starting points. In preparation for the exfiltration, one of the RH-53Ds had to be repositioned. During that maneuver, the helicopter's main rotor smashed into the cockpit of a parked EC-130; both aircraft erupted into flame, and the explosions turned the stark desert night into a ghastly beacon. During the hasty evacuation of the site, the remaining Sea Stallions were left behind.

On board the EC-130E were members of America's newly formed counterterrorist unit, known simply as DELTA. The unit had been activated in November 1977 but was untested, or unblooded, as military professionals would say, and this was to be their first operational mission. But while the troopers anticipated that their baptism of fire would soon come in Teheran, they instead found themselves trapped in a terrifying inferno fed by thousands of gallons of aircraft fuel. As one of the survivors would later report, the DELTA Blue Team troopers and air crew from the stricken EC-130 struggled to "unass the muther" as best they could, bearing their injured with them.

Caught in the tanker's burning, smoke-filled cargo bay, Master Sergeant Leonard M. Harris was quickly overcome by smoke as he attempted to rescue an Air Force crewman. Luckily for both men, they were pulled from the burning plane by other members of DELTA.

Harris and the other survivors were loaded into various aircraft for the trip out. Now, as the last Hercules flew in a rough trail formation through the inky darkness toward the Indian Ocean and safety, Harris began to regain consciousness. Watery eyes fixed on a light on the cabin roof and then wandered down to scan the confusion around him in the crowded cargo bay. DELTA troopers, dressed in Levi's, boots, and black field jackets, were interspersed with air crews, combat control team members, and other support personnel. Some sat in stunned silence, still wearing their woolen naval watch caps, while others stripped off layers of body armor, web gear, and sweat-stained clothing. Checking his own physical condition, Harris was surprised that, despite his brush with death, the only damage that he was able to perceive, other than a raw throat from smoke inhalation, was a singed field jacket and a relatively minor burn across the back of his left hand.

Looking down at his blackened field jacket, he absently picked at the melted tape that covered the only insignia on the assault teams' tactical uniforms: a small American flag sewn on the right sleeve. The troopers were to have displayed the flags after entering the embassy grounds so the hostages would readily follow them out during the exfiltration. After all, in their uniforms, the rescue team looked more like muggers in a New York subway than members of an elite counterterrorist unit.

Peering across the red-lighted cargo compartment, Harris realized that he and the rest of the passengers were just trying to get comfortable while riding on the bouncing fuel bladder covering the length of the plane. While team medical personnel provided aid, others appeared to be sorting out the recent events. Regaining a sense of stability, Harris was helped into a sitting position by another trooper. He noticed that his palms were wet with sweat, and not really knowing if it was from fear or just shock, he wiped them on his faded Levi's. Leaning his head back against the cold metal skin of the Hercules, he muttered, "Good ol' Herky Bird."

In the absence of fear and pain that fatigue brings, he began to reflect on the events that brought him to this situation. "How in the hell did I get in this mess?"

## The Reception Committee

As the last of the special operations aircraft lifted off from the chaos of *Desert I*, another intense drama was taking place in the Iranian capital. From a clandestine communications site well outside Teheran, Dick Meadows, a highly decorated and skilled former Green Beret, received word of *Desert I*'s disaster. His vulnerable advance party of special forces soldiers had infiltrated the city only a few days earlier under various cover stories designed to hide all traces of their true identity and mission. But now events beyond their control had forced them to immediately execute their own escape and evasion plans.

Nearly six months before *Eagle Claw*, on November 4, 1979, subject-matter experts from all relevant military and civilian agencies were drawn together to form an ad hoc joint task force (JTF) charged with both the planning and execution of the hostage rescue. Unfortunately, though, interservice and interdepartmental bickering soon created coordination problems. The resulting problems—demonstrated by the initial lack of cooperation from the Central Intelligence Agency (CIA) and state department

A mass demonstration in Freedom Square on Eisenhower Avenue about a half-dozen miles west of the U.S. Embassy. In the unlikely event that Iranian mobs would react quickly enough to threaten the rescue mission, a circling AC-130H Specter gunship would perform crowd control around the embassy. It would also prevent armored vehicles—from an army ordnance depot to the north or the police headquarters near the Ministry of Foreign Affairs to the south—from intervening. If the Specter found itself hard pressed to keep the threats at bay, a second gunship covering Mehrabad International Airport to the west would destroy Iranian F-4 Phantom jets, capable of chasing down the rescue aircraft, and assist at the embassy.

officials—tended to frustrate rather than facilitate planning by the JTF's staff officers under the stewardship of Major General James B. Vought, a highly respected paratrooper with much experience working with Rangers.

Ideally, CIA operatives would have already been in the area of interest providing current intelligence and would have been obtaining critical items such as safe houses and locally procured trucks in Teheran. But the agency was undergoing a number of reorganizations prompted by highly publicized criticism of its role in major incidents going back as far as the Bay of Pigs invasion of Cuba. Sensational reports of alleged assassination attempts on foreign leaders, Vietnam's numerous "black" or covert operations (including the unjustly maligned *Phoenix* program), and the increasing number of former CIA employees who wrote tell-all books added to the growing public perception of a bumbling group of spies running amuck.

After Jimmy Carter assumed the presidency in 1977, he appointed a fellow Annapolis graduate, Admiral Stansfield Turner, to oversee the restructuring of the CIA and the institution of his administration's "Georgia approach" to governmental management. Under Turner, hundreds of experienced personnel were laid off. The agency soon became heavily dependent on mechanical and technical means as the primary method of gathering intelligence instead of using those methods in conjunction with, or as a complement to, human intelligence (HUMINT) collection. By the time the embassy in Teheran was seized, Middle Eastern operations were in a major decline; in fact, the last full-time operative in Iran had already retired.

Despite the CIA's reinfiltration of one of its agents into Teheran, DELTA's thirst for intelligence on a broad range of matters was not satisfied. The black boxes were clearly failing to produce the information required to carry out this delicate operation, and the *Eagle Claw* planners in DELTA began to look within the special operations community for HUMINT collection means to make up the shortfall. The search led them to Dick Meadows.

A Revolutionary Guard bunker in central Teheran.

This was not the first time that Meadows had participated in an effort to free U.S. prisoners. Ten years before, he had been in charge of the compound assault team during Operation *Ivory Coast* (more commonly known as the Son Tay Raid), an airborne assault on a prisoner-of-war camp only 20 miles from Hanoi in North Vietnam.* Other exploits in Southeast Asia included the capture of North Vietnamese artillery pieces in Laos and the recapture of a major CIA outpost in that same country. Meadows was an expert in low-visibility insertions and takedowns.

Meadows had become a civilian advisor to DELTA after retiring from the Army, and his extensive background in clandestine cross-border operations, as well as his completion of the British Special Air Service (SAS) selection course, carried a great deal of weight in choosing him to enter Teheran ahead of the rescue force. Above all, the JTF planners knew Meadows could be trusted to do his best to accomplish the mission, and he knew DELTA inside and out. But all of that knowledge could be a problem if he were captured and interrogated.

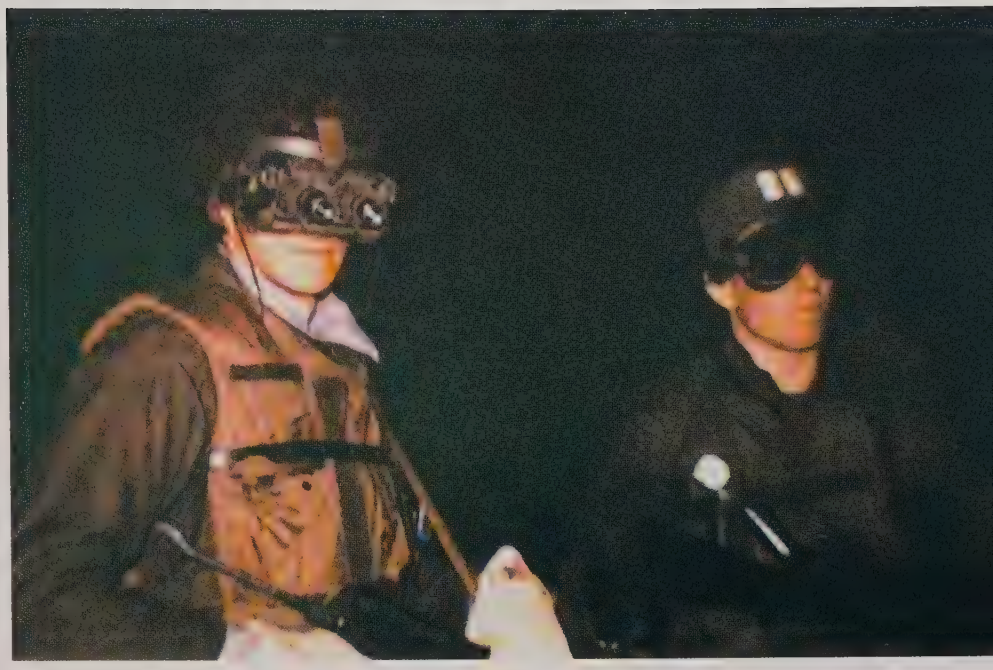
Meadows' orders were to infiltrate Teheran, establish a safe house, procure local covered trucks for the rescue force, and guide the rescuers from the landing zone to their assault positions near the embassy. He was the reception committee and, on paper at least, this was one of the less-complicated parts of the operation. One critical concern for Meadows was his cover—his background information and the story he fabricated to explain why he was in Teheran. CIA liaison officers supplied him with an Irish background, including all the necessary documentation and accessories, while the JTF provided additional backups and an enhanced language capability in the form of three sergeants recruited in Germany—two from Detachment A of the Berlin Brigade and one from the Air Force.

Unlike Meadows, these men already had covers and were conducting their daily lives under that blanket of anonymity. All were foreign-born nationals who had joined America's armed forces and were now U.S. citizens. One of the men was a native of Germany and was intimately acquainted with the murky world of working with and supporting intelligence requirements levied on the Army by other agencies such as the CIA. Another of the operatives was born in Great Britain and was easily cloaked with the mantle of a Scottish background. The third (who had undergone no previous special forces training) was a native of the Middle East and was fluent in Farsi, the primary language of Iran. These men would provide Meadows with the additional skills the advance party required.

*Over four dozen U.S. prisoners were held at the camp but were moved shortly before the raid and remained in captivity until after the 1973 signing of the Paris Peace Accords. One side benefit of the operation, however, was an accidental attack on a nearby compound that apparently killed as many as 200 Chinese, East Block, or Soviet specialists involved in upgrading North Vietnam's air defenses.

When it was discovered late in the planning that three high-ranking hostages were being held in the Ministry of Foreign Affairs building six miles from the embassy, an additional 13 soldiers were assigned from Detachment A in Berlin. There wasn't enough time to change the basic plan and shift existing personnel to other targets, so these men had to fill the operational void created by the last-minute intelligence. Special forces detachments like theirs had been preparing to fight potential Soviet invaders in the extensively built-up areas of western Germany since the late 1950s and were composed of experts in urban warfare.

*Eagle Claw*'s mission profile called for the advance team to rendezvous with the DELTA rescue force staging out of a little-used airfield near Qena, 300 miles south of Cairo in central Egypt. Upon receipt of the execution message, the 132 men of the rescue force and additional support personnel flew on two C-141s from Egypt to an air base operated by British and Omani personnel on the large Arabian Sea island of Misirah. At the same time, the helicopter element on the aircraft carrier USS *Nimitz* "patrolling" nearby in the Gulf of Oman prepared to launch its RH-53D helicopters to an isolated spot, code-named *Desert I*, in Iran's Dasht-e Karir (Salt Desert). Also, a contingent of four AC-130E and H Specter gunships was readied for launch the following night; they would fly directly from Qena to Teheran to support the rescue. The Specters would be refueled by KC-135 tankers as they passed over Saudi Arabia.



A force of a dozen U.S. Army Rangers and DELTA members made up two teams to secure the road running through the *Desert I* refuel site. Ranger and DELTA troopers armed with a Colt M16 assault rifle and Walther MP-L submachine gun peered intently throughout the night. The relatively heavy PVS-5 night-vision goggles could only be worn for about 30 minutes before a pilot or trooper would have to hand it off to a designated partner to wear. Within minutes after they rode their Yamaha motorcycles out of the belly of the first MC-130 to land, the team captured a bus with 44 Iranian civilians, blew up a gasoline tanker truck with a light antitank weapon, and ran off another truck. Although *Eagle Claw* planners were later criticized for establishing the refuel site in a moderately traveled area, mission parameters left them little choice, and DELTA planned to fly any Iranians taken into custody back to Misirah Island on the returning MC-130s. The Iranians would then be flown back to Iranian territory and released at Manzariyeh Air Base the following night. If the mission had been aborted after they had been flown from *Desert I*, the Iranians would have been turned over to the International Red Cross for repatriation.

The next phase of the operation called for DELTA's surgical assault force, along with its security and support element, to take off from Misirah in EC-130Es and MC-130Es of the 8th Special Operations Squadron. Their destination, *Desert I*, had already been surveyed by an Air Force combat control team member who placed remotely operated infrared beacons along the hasty landing strip. After the force successfully rendezvoused at *Desert I* near Garmsar, 265 nautical miles southeast of Teheran, the assault element was to load onto the helicopters and fly on to *Desert II* in the rugged, mountainous region just southeast of the capital. Once there, the choppers would be hidden nearby, at a site code-named *Figbar*, while the assault force linked up with the reception committee before dawn.

The assault force would settle in for the day while the DELTA commander, Colonel Charlie A. Beckwith, would infiltrate Teheran with 12 select troopers who would receive the trucks gathered by Meadows' team near the city at a secure warehouse called the Mushroom. It was their job to drive the small convoy out of the city on the second night of the operation and collect the rest of the rescue force from the hide site. After transferring to the six large tarpaulin-covered Mercedes trucks and a Volkswagen van, 106 DELTA and special forces troopers would journey to the capital where final preparations for the impending rescue would be made.

An M151 roars over a sand dune in Egypt. The soldiers given the mission of guarding the dirt road running through *Desert I* were not picked until after the main body of Rangers, slated to seize Manzariyeh Air Base, had arrived at Qena, Egypt. Intensive training immediately began for both the road-watch and airfield-seizure teams.

The plan called for the rescue force to depart from *Desert II* at 2030 hours and be in their designated assault positions by 2300 hours. Meadows would take Colonel Beckwith on a personal reconnaissance of the target before the attack at approximately the same time that the AC-130s were lifting off in Egypt.

The main assault group's three teams (code-named *Red*, *White*, and *Blue*) and Foreign Ministry assault group would use the principles of surprise, shock, and coordinated movement to take out Ayatollah's Revolutionary Guards. As soon as the short, violent rescue operation erupted at the walled embassy compound, the hidden RH-53D helicopters would emerge from their camouflaged position near *Desert II*. One would head for the large park surrounding the Foreign Ministry, while the rest would fly to sites at the rear of the embassy compound and the Amjedeih soccer stadium across the street, where both hostages and rescuers would be picked up. If the compound site couldn't be cleared of obstructions in time, all extractions would be conducted from the stadium.

Throughout the ground phase of the operation, one AC-130 gunship would orbit over the target area providing fire support, and another would cover the two Iranian F-4 Phantom jets on strip alert at Teheran's nearby Mehrabad International Airport. Two additional Specters would orbit close by in reserve. All parties concerned were fully confident that the massive firepower the Specters could bring to bear on the surrounding area would be more than enough to suppress any Revolutionary Guards attempting to reinforce their embassy security force and prevent the infamous Iranian mobs from interfering with the rescue. As one of the gunship pilots would later explain, the Specters' awesome firepower was the "best crowd-control measure" available.

While the AC-130s dominated the area, the helicopters would leave the chaos of Teheran for nearby Manzariyeh Air Base only 35 minutes away. Manzariyeh was to have already been secured by a 75-man ranger contingent and support personnel flying directly from Qena in four MC-130s. This elite light infantry unit was composed of experts in airfield seizure. Using M151s and commercial off-road motorcycles, they were capable of gobbling up the sprawling but lightly defended facility in a matter of minutes.

Throughout the exfiltration, F-14A Tomcat fighters and KA-6D Intruder tankers from the USS *Nimitz* would orbit over

Before operations could begin, Air Force ground personnel had to be flown into both Qena and the British Omani air base on Misirah Island to set up communications and logistics for the 34 special operations tankers, transports, and gunships involved in *Eagle Claw*.

Persian Gulf waters—on call to knock down any hostile aircraft coming after the vulnerable transports and gunships leaving Manzariyeh. If all went well, the entire force—Rangers, special forces, Meadows' team, support personnel, DELTA, and their newly rescued charges—would be quickly loaded aboard a pair of C-141s, which had made a quick dash from Dhahran, Saudi Arabia, and exfiltrated to Qena before the Iranians could take any effective countermeasures. There was no way to fly the helicopters out of Iran, and they were to be destroyed before the last Rangers left the airfield.

The catastrophe at *Desert I* changed all that. After Meadows received word over a clandestine radio to abort the mission, he notified the team, which dispersed from the safe house, and all made their individual ways to the passenger terminal at Teheran's Mehrabad International Airport. Security within the terminal was visibly increased. Unshaven and clad in an irregular mix of civilian and military clothing, the pride of Iran's Revolutionary Guard nervously paced back and forth near entrances, fingering their newly acquired Heckler & Koch G3 rifles. The menacing looks—as well as a healthy respect for the weapons' stopping power—caused Meadows to give each of the guards a grudging deference. Swallowing hard, Meadows entered the terminal entrance and walked directly to the Swiss Air ticket counter. Very deliberately, and somewhat slowly, he reached into the inner pocket of his corduroy jacket for the cash necessary to open the first of many doors to the waiting jet and freedom.

While being processed, he noticed that his Scottish comrade was in another part of the terminal, being questioned by Revolutionary Guards, customs officials, and soldiers. Meadows later learned that the large amount of U.S. currency that brought this unwanted attention to the Scotsman stayed in Iran with that group of officials. The newfound hatred of the Great Satan obviously did not extend to financial matters, and well-placed bribes of American greenbacks continued to do the trick.

Reaching down to retrieve his carryall, Meadows realized that despite the fact that word had been received about an "invasion" to the south, security efforts at the airport remained disjointed and uncoordinated. Walking at a casual but determined pace toward the Swiss Air jet, he wondered what things were like at the embassy.

Chapter 2

# A NEW GAME IN TOWN

*Kill one and terrorize a thousand.*
*—Sun Tzu, 500 B.C.*

One of the terrorists holding Israeli athletes at the Munich Olympics relays demands to German negotiators in front of millions of television viewers.

Festering Arab resentment of America's direct and substantial support of Israel grew steadily after the United States became the Jewish state's chief sponsor in the wake of the 1967 Six Day War. By 1973, when massive American arms shipments played a critical role in blocking an Egyptian-Syrian victory in the Yom Kippur War, the United States was firmly planted on a collision course with the rising tide of pan-Arab nationalism. From this point forth, Americans would no longer be incidental victims of terrorist attacks. They would be the targets.

During the Six Day War, the sweeping successes of the Israeli military made it clear to the Arab world that change could not be guaranteed by conventional forces alone. And watching from the sidelines with great interest were millions of Palestinians living in forced exile in the Middle East and in Europe. At the same time, the United States was preoccupied with the Vietnam War, the civil rights movement, and growing campus unrest. Against this backdrop, the United States hoped that every effort would be made to solve the numerous long-standing issues in the Middle East peacefully. Failing

Television crews and reporters line the balcony of the Beirut International Airport during the nine-day hijacking of a TWA jet, June 22, 1985. The media was—and continues to be—one of international terrorism's most important weapons. *Wide World Photos*

The grand finale of the Palestine Liberation Operation's September 1970 hijacking of three civilian airliners. Their 300 passengers were held for a week and, after their release, the aircraft were blown up at an abandoned airfield near Amman, Jordan.

that, the U.S. hoped that disagreements could be prevented from boiling over into open warfare. But the Palestinian issue exploded to the surface, amid smoke and gunfire, in the Hashemite kingdom of Jordan.

Cornered by Soviet-sponsored, Syrian-armed Palestinian forces intent on using his country as a staging area for raids on Israel, King Hussein ibn-Talal used his army to drive the Palestinians into Syria and reasserted his authority. The king and his Hashemite followers had never enjoyed an easy relationship with the various *fedayeen* groups making up Yasser Arafat's Palestine Liberation Organization (PLO), and its military arm, the Fatah, which was openly encroaching on the country's control of the Jordan River Valley. One faction, George Habbash's Popular Front for the Liberation of Palestine (PFLP)—the largest and most anti-Hashemite of the fedayeen—had worked feverishly to undermine Hussein's throne long before the bloody confrontation.

The intense fighting for the capital of Amman and across northern Jordan in September 1970 caused great concern in the West, and a number of countries sent supplies. Military forces were also alerted to move in and provide help, but the Jordanian army succeeded without them. This stunning defeat of the Fatah-led Palestinians, however, laid the groundwork for the emergence of full-fledged terrorist organizations such as Black September, a radical group that operated as an arm of the "moderate" PLO until it split off on its own. The name itself commemorates the fedayeen's expulsion from Jordan, and they took their revenge on the man who directed King Hussein's forces, Premier Wafsi Tal, by assassinating him the following year in Cairo.

While terrorists have never hesitated to murder any Arab leader who wasn't in strict agreement with their particular

As an instructor looks on, a member of SAS takes position and returns fire against mock terrorists during a training exercise. He is positioned behind the engine block, which can provide adequate protection against most conventional pistol and rifle ammunition.

dogma, it usually isn't considered acceptable to blame other Arabs for their numerous defeats by Israel. The fledgling terrorists saw the Western world as the cause of virtually all Arab problems—perceived or real—and several factors combined to make Western Europe an excellent target for their activities: Western Europe was close to the Middle East, and its open societies gave the terrorists a remarkable degree of freedom to carry out their activities.

Terrorists' threats to use violence against individuals to affect a much larger, related group is not a new phenomenon; what is called terrorism today is a tactic of warfare that's been employed throughout history.

These new terrorists were also media-savvy and fully understood the ramifications of the revolution in global telecommunications. Advances in television technology allowed them to move beyond the printed word and see their heinous acts broadcast to much of the world's population. Ratings-conscious news agencies and the viewers themselves had enabled the television camera to become one of the terrorists' chief weapons.

Bombing, hijacking, assassination, and kidnapping are types of terrorist warfare magnified a thousand-fold by the electronic media. In the early 1970s, the world was introduced to new television stars such as Black September* and the

*One of the many organization names used by Sabri Khalil al-Banna (alias Abu Nidal) in an effort to create confusion in the West and make the armed struggle against Israel appear larger than it was. In addition to Black September, other names used by the Abu Nidal organization include: Fatah Revolutionary Council, Black June Organization, the Arab Revolutionary Brigades, and the Revolutionary Organization of Socialist Muslims.

**Left page:** Israeli commandos, circa 1960, are representative of the high degree of individuality commonly found in elite special operations units. Informally dressed in a variety of military jackets, coats, scarves, and sweaters, they are a diverse lot with members who might easily pass themselves off as Britons, Arabs, Frenchmen, or Americans. Indeed, they may have once been Britons, Arabs, Frenchmen, or Americans before emigrating to Israel. Such elite troopers from Unit 269 were responsible for the successful hostage rescue at Entebbe. The soldier in the center is armed with the standard Soviet assault rifle of the day, the 7.62mm Kalashnikov AK-47, while the others carry 9mm Uzi submachine guns that were based on earlier Czechoslovakian weapons but designed and produced in Israel.

Baader-Meinhoff Gang. In 1970, several commercial airliners were hijacked and taken with their 300 passengers and crew to Dawson Field, a desert airfield 40 miles from Amman formerly used by Britain's Royal Air Force. After a week, the hostages were removed from the aircraft, which were then blown up in full view of the world. But the event that had the deepest and most far-reaching impact was the drama that unfolded at the 1972 Olympic Games in Munich, West Germany.

Television viewers were stunned by images of the wanton murder of innocents, and governments in the West soon felt the power to control events slipping from their hands. Terrorist actions—or even the threat of such actions—were increasingly shaping policy decisions.

Some ramifications of these terrorist attacks not observed by the public were the new requirements placed on international law enforcement and military forces. After failing to negotiate for the release or rescue of the Israeli athletes, West Germany's security needs were scrutinized from every possible angle with Teutonic efficiency. And the realists who would have to face the next round of fighting concluded that virtually every Western nation was now in the battle with this ancient form of warfare. The emergence of a new combatant—the counterterrorist—was Western Europe's response.

Each country dealt with terrorism based on how its own political, economic, social, and religious situation affected its security. Germany established a special unit within its border police—GSG-9, short for Grenzschutzgruppe 9—and the French formed the Groupe d'Intervention de la Gendarmerie National (GIGN). The British turned to their old standby, the SAS, while the U.S. decided to wait and see, with the attitude that, "This will not happen to us." Yet, through the early 1970s, it was painfully obvious that terrorists were moving a step or two ahead of the various national security forces and could attack whenever or wherever they wanted. The counterterrorist groups would soon prove, however, that they too were forces to be reckoned with.

In October 1977, at Mogadishu Airport in Somalia, Germany's GSG-9 exacted revenge for the tragedy at Munich by foiling a terrorist hijacking. Unknown to the terrorists, the Germans had learned much from the tragedy of Munich, and with the help of two SAS commandos who blew open the aircraft's doors, a 30-man GSG-9 force stormed the plane during the early morning hours. Later, in May 1980, the SAS gained international fame by conducting one of the most daring and highly publicized hostage rescues to date—Pagoda Troop of B Squadron, 22nd SAS Regiment, launched a spectacular assault on the Iranian Embassy in London as television cameras broadcast the action around the world.

Preceding these events was the most famous rescue operation of the period: the raid on Entebbe Airport in Uganda, conducted by the Israeli special forces. Launched from bases within their own borders more than 2,500 miles to the north, the commandos of Unit 269 flew directly into the site where 103 hostages were held. In the early morning darkness of July 4, 1976, Operation *Thunderbolt* was carried out with clockwork precision. Keeping it simple, the rescue force landed in four C-130s. The lead Hercules casually taxied to within 200 yards of the terminal building holding the hostages, and a black Mercedes sedan rolled down the ramp. The sedan cruised up to the brightly lit building, followed by a pair of nondescript Land Rovers, and suddenly disgorged nine Unit 269 commandos.

Within minutes, the Israeli strike force had secured the terminal area and airfield perimeter, removing a potential problem by blowing up the Ugandan MiG fighter aircraft, and then loaded up the rescued hostages. The rescue force commander, Colonel Jonathan Netanyahu*, was killed, as well as the entire terrorist gang and an undetermined number of Ugandan soldiers protecting the captors. All but one of the hostages, an elderly woman who had been taken to a hospital and later murdered, were quickly freed and flown to Nairobi, Kenya, where the injured were transferred to a waiting jet airliner equipped for medical emergencies.

## Americans Become Targets

The United States entered the counterterrorism (CT) arena as a very unwilling participant, primarily due to its deeply engrained separation of military and police powers and the

* The colonel's brother, Captain Benjamin Netanyahu, later became a leading figure in Israeli politics, including prime minister (1996–1999) and minister of foreign affairs (2002–present).

The aftermath of a Red Army Faction car bomb explosion at Rhein-Main Air Base outside Frankfurt, West Germany, August 8, 1985. Over 20 people were injured, and the blast killed one U.S. airman and the wife of another. The explosives were packed into a car with forged U.S. license plates and driven to the parking lot outside the headquarters of the 435th Tactical Air Wing. It is believed that the terrorist who drove the vehicle gained access to the base by using the identification card of a U.S. serviceman murdered the previous night.

resultant conservative approach of U.S. military leaders to what they felt was a police problem. Neither the political nor military hierarchies originally supported the view held by many in the lower echelons that media-savvy terrorists were an increasing threat to the United States and its interests.

U.S. intelligence agencies learned their first direct lessons from the new terrorists in the September 1970 uprising in Jordan. It was feared that Fatah insurgents would seize the U.S. Embassy in Amman, and U.S. paratroopers were alerted to, if necessary, seize the airport, land an armed force, and retake the embassy.

As with Operation *Eagle Claw* some 10 years later, the Jordanian rescue plan was complicated, unwieldy, and fraught with unnecessary risks. For example, the 509th Airborne Infantry, which was selected to seize the airport, would have had to fly to Jordan via an extremely lengthy, circuitous route from their staging area in West Germany. Instead of taking the normal route over continental Europe to reach the eastern Mediterranean, their operational plan called for a flight over

# Pistols

Stopping power, mass versus velocity, number of rounds versus weight—the argument seems never-ending, but over time, weapons firing the 9mm (.38-caliber) round have become respected additions to DELTA's arsenal.

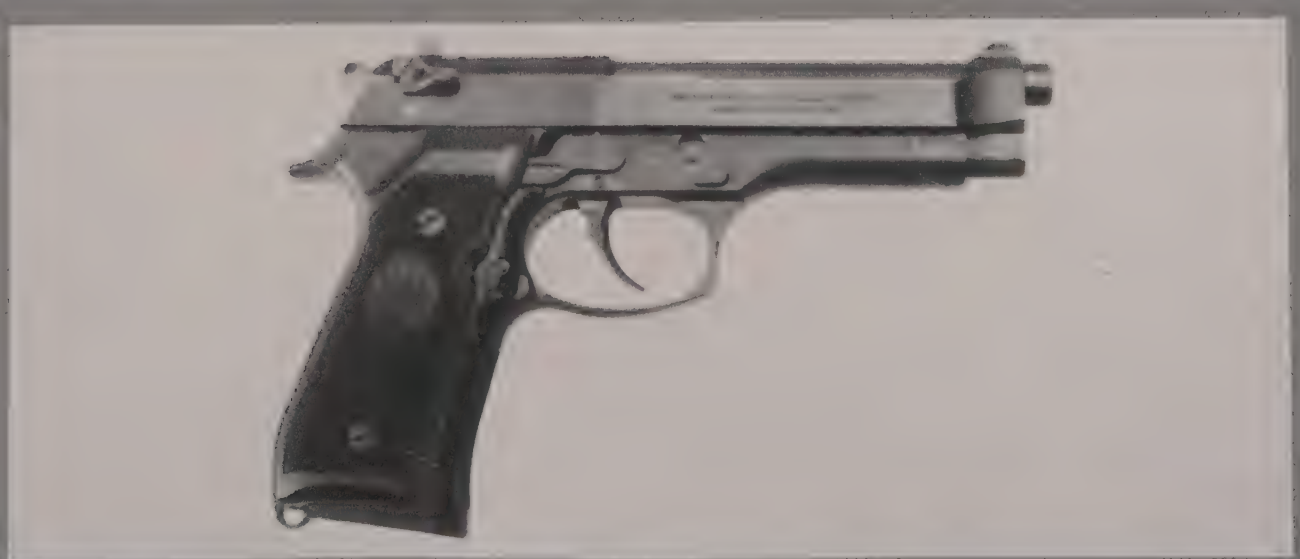
Modern conventional warfare generally calls for lightweight, high-velocity rounds such as the Colt M16's .223-caliber/5.56mm or NATO's standard .308-caliber/7.62mm that are effective to several hundred yards. For the takedown of a hostage-holding site, however, 100 feet is considered an extreme range. Counterterrorists need a heavy slug that will knock a man down with as few shots as possible, and rounds smaller than .45-caliber have often proven to be inadequate against a determined enemy. As early as the beginning of the twentieth century, Moro warriors battling U.S. soldiers in the Philippines were not stopped by government-issue .38-caliber pistols and, most recently, in the GSG-9 operation against aircraft hijackers at Mogadishu, Somalia, the German commander was forced to empty his snub-nosed .38-caliber into a psyched-up terrorist who continued to fight even as six bullets ripped into his body. For this reason, many operatives prefer to have a bigger weapon.

A big (very big) round like that from the Smith & Wesson .44-caliber Magnum will drop a hijacker in his tracks but will also likely penetrate its intended target as well as several seats and passengers before it stops. Moreover, the .44 Magnum's substantial recoil can delay firing the next shot—possibly with disastrous results. The .45-caliber ACP round fired by the Colt or Springfield Armory M1911A1 automatic pistols has a great advantage over its famous friend during takedowns. Its low muzzle velocity, at roughly 830 feet per second, is about half that of the .44 Magnum, and hostage safety is greatly increased since there is more likelihood that the captors' bodies will stop the bullets.

But while this would seem to make the .45 the weapon of choice for takedowns, many shooters have gravitated to the 9mm Beretta Model 92 pistol. The high velocity of its 9mm parabellum slug is easily brought below 1,000 feet per second by reducing the round's charge, and, depending on which variant of the Model 92 is used, the counterterrorist can make almost twice as many shots before reloading than if he carried a conventional .45-caliber automatic.

The Colt automatic pistol and the higher-quality product manufactured by Springfield Armory, normally fires from eight- and seven-bullet magazines, respectively, and each can carry an additional round in the chamber, while the Model 92 and its variants have 13- and 15-round magazines. The tradeoff is that while 9mm bullets are indeed smaller, their size is adequate and the Model 92 has more of them. Moreover, the ammunition a DELTA trooper carries on his body and in his weapon is all that he can count on during a takedown. If everything goes as planned, there will be very little shooting. But if the operation goes sour, it's just DELTA and the terrorists in a high-intensity shootout of unknown duration. Frequently, the first side to run out of bullets loses and, with a weight nearly half that of a .45-caliber bullet, a lot of 9mm rounds can be carried without encumbering a trooper.

**The Beretta 9mm Model 92F pistol, called the M9 by the U.S. Army.**



The Colt .45-caliber M1911A1 automatic pistol.

the North Sea and the Atlantic Ocean around Spain to the Gibraltar slot, and then across the length of the Mediterranean. The force would have to take this roundabout route because NATO allies wouldn't grant overflight rights—a situation unpleasantly similar to what F-111 pilots would find 16 years later during a retaliatory raid on Libya for sponsoring a terrorist bombing.

U.S. planners were faced with a number of similar situations over the next two years, and missions were not approved. Either White House or state department jitters prevented airborne and special forces units from launching counterterrorist assaults. Terrorist networks in the Middle East, however, could easily strike soft targets and continued to target Israeli citizens. Americans stationed in Germany, as well as West Germans, found themselves the targets of former antiwar students turned terrorists. In May 1972 the Baader-Meinhoff Gang, also known as the Red Army Faction, finally forced the issue on the United States by conducting six separate bombings. Their targets were the U.S. officers' club in Frankfurt and the U.S. Army Europe Headquarters in Heidelberg. The media provided some coverage of these strikes, but it was minimal compared to the extensive coverage of the Munich Olympic Games.

While facing the capture of American hostages wasn't yet a problem, perceptive military leaders realized that the United States needed to be ready and able to respond to terrorism, and units within the Army's special forces community were tasked with conducting rescues using the hasty option response. In lay terms, this means that if captors begin to harm their hostages, the team attempts a quick, efficient rescue. But the hasty response doesn't allow for the meticulous planning, coordination, and rehearsal typically needed by CT units to execute surgical strikes, so CT units hope they'll never have to conduct them.

Soon after Munich, American military and civilian advisors recommended that a suitable force be established to fight terrorism. But it wasn't until the increased threat was demonstrated to President Jimmy Carter and the feasibility of creating a unit like those that struck at Entebbe and Mogadishu that the United States acknowledged the need to establish its own full-time, state-of-the-art counterterrorist response unit. Operation *Thunderbolt*'s success further confirmed what many planners

# Automatic Weapons

Although pistols are preferred in most hostage situations, submachine guns are needed when large target areas or many terrorists (four or more) are involved. DELTA initially settled on the domestically produced .45-caliber M3A1 "grease gun," a World War II-vintage weapon that went out of production in the early 1950s and was generally shunned by the Army. But the same features that made it unpopular also made it an effective tool for room-clearing: a low muzzle velocity that allowed its heavy slugs to slam into—not through—a terrorist, and a rate of fire slow enough to shoot off single shots without disturbing the shooter's aim. The M3A1 is now obsolete due to a lack of replacement parts, but has made way for a variety of submachine guns.

Selection of weapons is a personal choice that often involves weight, accuracy, cleaning frequency, ammo per magazine, and reliability after it has survived a parachute jump. The Heckler & Koch MP5 and the less-expensive easily concealed Walther MP-K are both German arms that fire 9mm rounds, as does the Colt submachine gun that shares many parts with the M16 rifle. The compact Colt Model 733 Commando assault rifle, now standardized as the M4, also benefits from this commonality and can be used on missions requiring its higher velocity 5.56mm round.

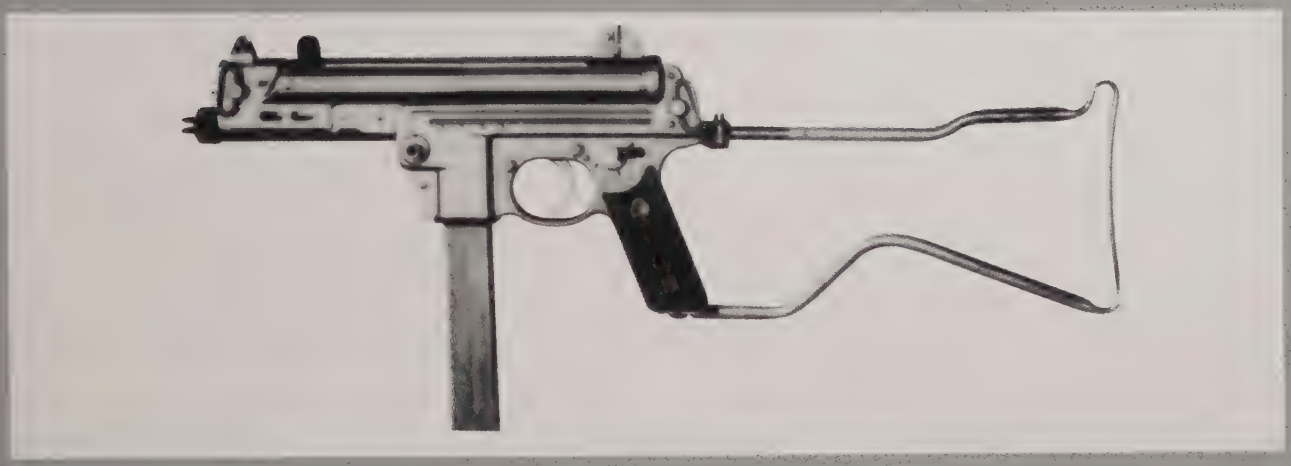
**An M4 fitted with sound suppressor, Aimpoint sight, and high-intensity light awaits it operator in Kosovo.**

**Colt 9mm submachine gun.**

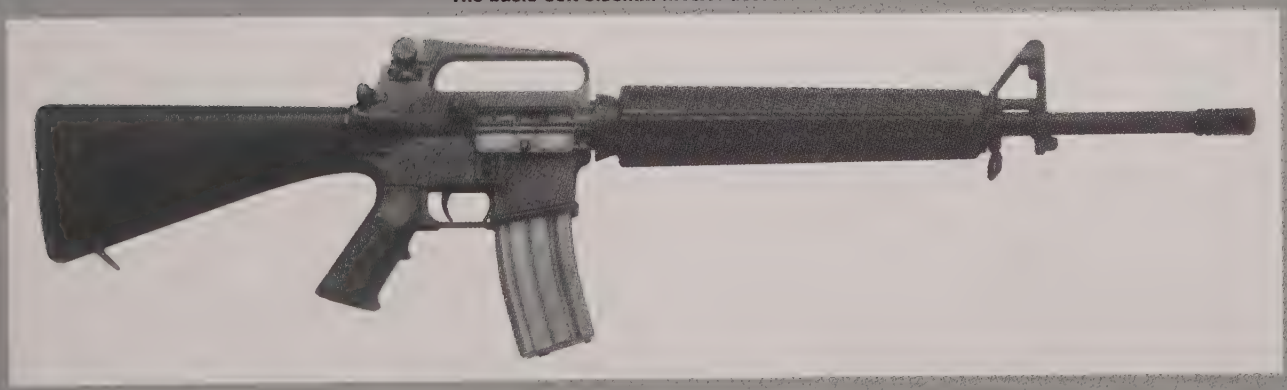
**The General Motors Guide Lamp Division .45-caliber M3 submachine gun often described as "a pleasant gun to shoot."**

**An old stand-by from the Vietnam era: the Colt 5.56mm Model 733 Commando assault rifle. Its sister, the Model 727, is today standardized with minor modifications as the popular M4 carbine assault rifle.**

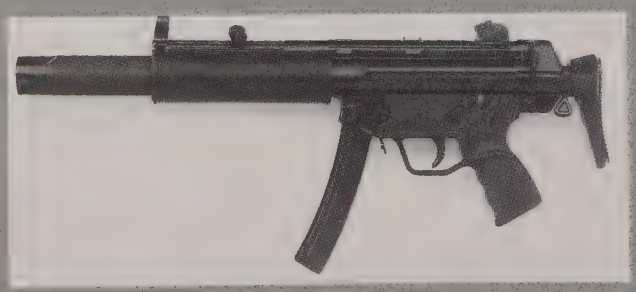
The Walther 9mm MP-K submachine gun, which served as a useful bridge between the M3 and the MP5.



The basic Colt 5.56mm M16A4 assault rifle.



The Heckler & Koch 9mm MP5 submachine gun.



The Heckler & Koch MP5 SD3 fires 9mm ammo and, with its collapsing stock and integral silencer, is an outstanding weapon for the close-in fight. The sound suppressor is a two-stage external silencer. The first stage of the system absorbs gases while the second absorbs the muzzle blast and flame. The bolt noise is absorbed by buffers made of rubber. If you use subsonic ammo, the report can be heard more than 15 to 20 feet away.

## Grenades

The familiar "pineapple," properly known as the Mk II fragmentation hand grenade, was pulled from Army frontline service over a decade before DELTA was formed. A cylindrical canister about the size of a shaving cream can is used for concussion grenades, chemical grenades (such as tear gas), and flash/bang grenades. This design allows the grenade's user to gently roll it a predictable direction and distance into a room, unlike the Mk II and similar grenades, which could wobble almost anywhere—including back up against the very wall that a trooper is using for shelter! Before the relatively recent fielding of the flat-sided M560 series fragmentation grenades, if a mission profile called for use of an antipersonnel grenade with a predictable roll, an M57 or M61 would have to be soldered into an appropriately sized tin can to achieve the desired effect. Once the pin was pulled and the safety lever fell away, a nearly perfect roll could be achieved every time.

**Flash-bang grenades with no-snag caps in an Eagle Industries hip pouch. Center pockets hold clips for 9mm Heckler & Koch submachine guns.**

Armed with a Colt Model 727 carbine, a DELTA trooper pulls personal protection duty during Operation *Desert Storm*. Note the trooper's sterile uniform (no identification or other markings) and long hair. A three-power telescopic site is mounted on the carbine.

already knew: the United States needed a small surgical force capable of carrying out such operations. It was their contention that, despite the claims of the airborne community, ranger companies and battalions were neither trained nor equipped for hostage rescues.

From the smoke of military infighting and political intrigue, 1st Special Forces Operational Detachment–DELTA was formed in 1977. Six ALPHA detachments (A teams),

# British Special Air Service

Great Britain's 22nd Special Air Service (SAS) and U.S. Special Forces have enjoyed a long, close relationship that began in earnest during the late 1950s. Lieutenant General Sir Charles Richardson, Britain's director general of military training, inspects an SAS unit during an exercise with the 5th and 7th Special Forces Groups at Camp Troy, North Carolina, September 28, 1962. General Richardson's visit turned out to be a pivotal event for the SAS. While the conservative British military establishment had grudgingly conceded the regiment's value in certain situations, the unit was generally thought of as little more than a private army of ill-disciplined mavericks that skimmed some of Britain's best soldiers from the top of traditional regiments. A tour with the SAS could kill a young officer's career.

At Camp Troy and Fort Bragg, Richardson witnessed SAS troopers studying advanced demolition and field medicine techniques and engaging in specialized training in foreign languages and a worldwide assortment of weapons. He left North Carolina greatly impressed with what he saw, and the almost immediate improvement in the attitude of the British military establishment toward the SAS was credited to the general's glowing report.

The same month that General Richardson visited SAS elements training in the United States, the U.S. Special Forces soldier who would later found DELTA, Charlie Beckwith, led a troop from A Squadron, SAS, in a combined exercise with the French "paras" of the 1st Batallion de Parachutistes de Choc in Corsica. Beckwith had been attached to the regiment as part of an ongoing exchange program and would ship out to Malaya with the SAS to take part in deep jungle penetration missions against guerrillas along the Thai border in 1963. The tour nearly cost him his life, but upon his return to Fort Bragg, he pushed hard to have SAS training and organizational techniques adopted by special forces.

# Shotguns

Shotguns are useful in a variety of situations but are most commonly associated with forced-entry techniques. Heavy rifled slugs can supply the pure smashing power needed to quickly and efficiently blow the hinges off most doors. Sabot rounds allow deeper target penetration and are best employed against vehicle or aircraft engines and door-locking mechanisms. After entry has been gained, shotguns can also be used against the hostage takers.

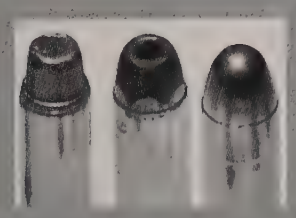
**The Mossberg 12-gauge Cruiser 500 shotgun.**

A Task Force Falcon soldier searching for Saddam Hussein wields a 12-gauge shotgun equipped with an external high beam light mounted under the barrel.

When DELTA was formed, its armorers developed special lighting equipment that could be attached to weapons for night operations. Today, such devices can be obtained off-the-shelf from manufacturers or are integral to the weapons. (A) A Hensoldt aiming point projector fitted to a Heckler & Koch MP5 A2 submachine gun and (B) a laser pointer built into the firearm of a Mossberg 12-gauge shotgun. Also note the Stabo rings attached to the soldier's tactical vest and the flash-bang grenade (an SAS invention) ready for use in his left hand.

## Ammunition

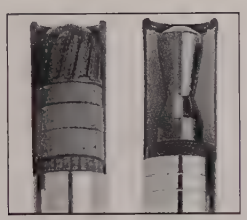
When choosing ammunition, CT specialists want a man-stopper that will knock a terrorist down and keep him down. While the heavy .45-caliber slug remains ideal for hostage situations, the lethality of smaller slugs, like the 9mm, can be greatly enhanced by using soft-point bullets with hollow or flat tips, which expand the soft lead slug into a broad mushroom-shaped projectile upon entering the body, increasing its shock effect dramatically.



Flat-point (A) and conventional (B) bullets.

The rules of engagement in most wars prohibit the use of such ammunition, but DELTA troopers participating in a hostage rescue are not subject to the restrictions of the Geneva Convention. Like their police counterparts, they can legally use hollow-point ammunition (or exploding rounds that shatter on impact) to subdue captors and save the lives of hostages.

Advances in technology have complicated matters for DELTA and other CT specialists by adding dangerous new weapons such as handguns and bombs with almost no metal parts. Initially, only law enforcement agencies and the military had access to lightweight Kevlar body armor (which, incidentally, does not set off metal detectors). But now this highly effective armor is readily available to terrorist organizations. When worn in thin, easily concealable layers, Kevlar will stop the low-velocity slugs normally required for passenger safety. Technology and tactics have provided solutions to these and other problems but the decades-old argument over the most appropriate weapons to use will die harder than any flesh-and-blood fanatic.



A 12-gauge rifled slug (left) and 12-gauge sabot slug (right).

commanded by captains, make up a company-sized BRAVO detachment (B team), commanded by a major. A CHARLIE detachment (C team) is a battalion-sized organization commanded by a lieutenant colonel. Since the 1st Special Forces Operational Detachment was commanded by a full colonel and structured along completely separate lines, following the squadron-troop structure of Britain's famed SAS, it became a DELTA detachment. Using the concept of the troop and the squadron as the building block or base, it initially trained to conduct counterterrorist operations. Activities in Iraq and Kuwait, however, revealed that DELTA's one-dimensional media image of a super-secret counterterrorist team fell well short of reality.

Charlie A. Beckwith of DELTA, circa 1979.

## DELTA and *Blue Light*

Both DELTA's sponsors and opponents within the military held firm to ideas on who should respond to the terrorist challenge. Most of DELTA's sponsors were typical of America's military leadership. They were conservative officers who were slow to respond to the terrorist threat, but once convinced that the threat was real, they were bulldogs in their support of the unit. And those who had worked hard to undermine or sidetrack

DELTA (primarily because they didn't acknowledge the reality of the threat) eventually offered their full support.

Army Chief of Staff General Bernard Rogers, an astute Kansan and Rhodes scholar, watched as the armies of Great Britain and West Germany rapidly adopted what most American policymakers thought of as police powers normally kept out of the military's hands. After the Carter White House made it clear that it wanted a unit with specialized capabilities, Rogers approved DELTA's formation and told senior planners that he wanted the unit operational—now!

The person most instrumental in DELTA's early development was Lieutenant General Edward C. "Shy" Meyer. As the deputy chief of staff for operations, he was one of the most influential senior officers in the Army, and his office issued the plans and policies for how the U.S. Army would operate. General Meyer took a direct, personal interest in DELTA. From the first discussions about the need for a U.S. counterterrorist force through its birth and Operation *Eagle Claw*, Meyer always provided guidance and support. The rest of the Army may have called him Shy, but to DELTA he was Moses, parting the waters for his people.

General William DePuy, commander of the Training and Doctrine Command, was another DELTA supporter. General DePuy was *the* expert in training. Even though he was a conventional soldier, he recognized that a force "like the SAS" was needed (as he often said in major policy meetings). He had to be won over before General Rogers and others, but that proved easy after inquiries about similar organizations in Europe demonstrated that an effective CT unit could be formed within the U.S. Army. General DePuy would provide the training support.

DELTA's architect was the commandant of the special forces school: a gruff veteran of the guerrilla wars in Southeast Asia named Colonel Charlie Beckwith. Not only did Chargin' Charlie have a wealth of experience in unconventional operations, but he also knew who the power brokers were and how to use them. In 1975, when General "Iron Mike" Healy was reassigned from his command at the John F. Kennedy Special Warfare Center at Fort Bragg, his replacement was Major General Robert "Barbed Wire Bob" Kingston. Kingston's association with Beckwith went back to the days when Beckwith was an exchange officer with the SAS and Kingston was with the British Parachute Regiment. The two had also just served together at the Joint Casualty Resolution Center in Nakhon Phanom, Thailand, in 1973–1974. Kingston would work closely with General Meyer to establish an SAS-type unit.

During Colonel Beckwith's tour as commandant, the special operations community watched Europe's response to the outrages of various extremist groups. In an area known as Smoke Bomb Hill, special forces members refined their traditional skills and added the hasty-response operations to their repertoire. Special forces, however, had to carry out a wide range of missions and could not dedicate much of their training to hostage rescues.

Other soldiers lent their guidance and support during this critical period: the commander of the 10th Special Forces Group, Colonel Othan "Shali" Shalikashville; General Frederick J. "Fritz" Kroesen of forces command, who controlled all units stationed in the United States; and the XVIII Airborne Corps chief of staff, Brigadier General James Lindsay. At one point during DELTA's shaky beginning, Shalikashville lined up all his senior commissioned and noncommissioned officers and told them flatly, "The job that Colonel Beckwith has to do is more important than the job we have to do. I would encourage anyone who has the desire to try out for this unit." When General Kingston's successor refused Beckwith's request to move DELTA into Bragg's underutilized post stockade, Lindsay saw to it that the unit would get it, reasoning, "Here we've got a nice stockade facility where we're keeping eleven bad guys. . . . Why don't we take the eleven and put them downtown in the Fayetteville jail? Your use of the stockade is better than the use it's being put to now. Colonel, you've got it!" Beckwith was obviously pleased that his problem had been solved so quickly. Ten years later, Lindsay donned eight stars on his shoulders and became commander of the newly created Special Operations Command responsible for providing combat-ready Special Operations Forces for rapid deployment to other unified commands around the world.

Still, support from the special operations community was not very strong at this point. Meticulously trained special forces units had conducted numerous missions during the Vietnam War, but now there wasn't a need for such specialists—or so the conventional leadership thought. And the conventional leadership controlled the Army and directed the downsizing of forces. Providentially, control of special forces fell to the commander of the JFK Special Warfare Center, and since General Kingston, his boss, was in control, Beckwith had the degree of freedom required to make DELTA a reality.

# Sniper Rifles

Nearly all DELTA weapons—old or new—have been accurized to some degree by the unit's gunsmiths. Loose-fitting parts typically found even in quality mass-produced weapons are replaced by custom-built pieces with closer tolerances, specialized trigger mechanisms, and better sights. Before it was superseded by the heavy-barreled 40XB sniper rifle (specially manufactured for DELTA by Remington Arms), modifications were made to the trusty M14A1 to upgrade its already formidable performance as a sniper rifle.

Modifications typically include polishing and hand fitting the gas cylinder and piston to improve operation and reduce carbon buildup. Barrels are always carefully selected to

**The Remington 7.62mm M40A1 sniping rifle mounting a ten-power U.S. Marine Corps telescope commonly used by DELTA.**

**The Springfield Armory 7.65mm M21 sniping system based on the M14 rifle.**

**Snipers, with M24 weapons systems, prepare for operations in northern Afghanistan.**

ensure correct specification tolerances and are bedded into the forearms with fiberglass compounds. Trigger housing groups are carefully fitted and polished to provide a crisp hammer release, and suppressors are fitted to eliminate sound and flash, which could reveal a sniper's position. Receivers can also be individually fitted to stocks using a fiberglass compound. The U.S. Army now purchases an off-the-shelf version of this weapon from the Springfield Armory called the M21 sniping rifle. DELTA troopers often use this weapon during training, and it also receives considerable reworking, such as having plastic spacers added to customize the length of the stock. The M40A1 and M24 sniping systems, standardized versions of the 40XB, are also used by the Army and Marines.

## Assault Packs

Regular civilian backpacks were considered for situations when DELTA troopers had to move unnoticed through populated areas, but past experience had proven that commercial packs did not hold up to the rigors of special operations. The Eagle Industries A-III assault pack was found to exceed all special operations expectations and from a distance could easily pass as a civilian backpack.

Complaints by the Rangers that DELTA would deepen their current manpower problems (partially true) and that the unit duplicated some of their functions (untrue) were brushed aside early on. Beckwith's only real opposition came from the commander of the 5th Special Forces Group at Bragg, Colonel Robert "Black Gloves" Montell, who believed that the shoot-from-the-hip hasty response was perfectly adequate.

About the time DELTA seemed to be a sure thing, Kingston was transferred to Korea, and Major General Jack "Bobo" Mackmull assumed command. No doubt Mackmull had received his marching orders from Washington to keep the program on track, but as a West Pointer and aviator, he was not very familiar with the missions and capabilities of this strange little unit under his command, and unfortunately, he made little effort to learn. Once DELTA was approved for activation, Mackmull was told to come up with a backfill unit until DELTA was certified for operations some two years in the future. Montell's 5th Special Forces Group received the nod.

To meet this requirement, Montell selected 40 special forces troopers and trained them in hasty-response techniques. Code-named *Blue Light*, the unit operated under the principle that a bird in the hand is worth two in the bush, and Mackmull approved both funding and personnel for the unit. Despite reassurances from insiders, it appears that Beckwith feared that Montell's stalwart professionals would derail DELTA before it had a chance to prove itself. If Beckwith lost his support in Washington, he would lose his unit.

Initially, what kept DELTA and its concept of a full-time, low-visibility CT organization alive was its strong supporters. When General Rogers discovered that expected resources were being routed away from DELTA, he went ballistic. From that point on, through the support from the chief of staff on down the line, DELTA was given the breathing room it needed to grow from a concept to a full-fledged force.

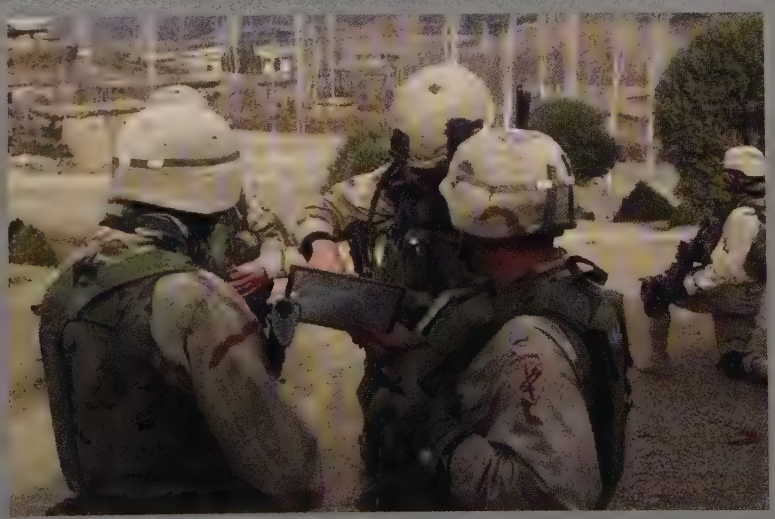
After 1st Special Forces Operational Detachment–DELTA was activated in October 1977, Beckwith had to select and train his new unit. DELTA troopers would have to blend perfectly into the civilian world when required and needed unique skills—from the military arts to climbing the sides of buildings to hot-wiring cars. Finally, on November 4, 1979, DELTA completed its certification exercises.

# Clothing

From the early days of hasty-option operations, counterterrorist equipment has steadily evolved. Lightweight, highly rigid specialized clothing and equipment has now become standard for CT teams. Several European units such as the SAS and Germany's GSG-9 learned from experiences at the Iranian Embassy in London and at the Mogadishu airport that general-issue equipment is great for conventional forces but suffers from dangerous shortfalls when used during specialized operations. Much equipment development work has focused on the tactical assault vest and modular pouches attached to the upper torso and hips, which incorporate such items as extra ammo, radios, first-aid pouches, and rappelling rings. Despite the fact that the soldiers belong to teams, each man puts a great deal of faith in his individual gear. The equipment must be capable of accommodating a number of modifications to handle, for example, either flash/bang or gas grenades and either MP5 magazines or Colt 733 Commando magazines. Creating a basic vest capable of handling interchangeable sets of pouches and holders to adapt to each specific mission answered this need.

**The figure-eight descending link not only prevents clothing from being dragged into the snap link but also allows the climber to control his descent with only one hand while leaving the other free to fire weapons, throw grenades, or place charges. This mountaineering device was added after the operation at the Iranian Embassy in London where an SAS commando was nearly killed by his own explosives. The soldier became stuck outside a window after a demolition had been placed and its fuse ignited. Only quick action by his buddies on the roof above saved his life.**

**DELTA troopers (and all CT specialists) wear mission-specific gear. While the man at above equipped for an average takedown, the SAS trooper at left is set to operate in a chemical environment and wears the minimum possible gear around his chest and hips to help ensure that nothing will snag his climbing rope.**



**A mixed group of special operators sporting upgraded Interceptor body armor, kneepads, and SATCOM prepare to move out in Afghanistan.**

Chapter 3

# THE MAKING OF A DELTA TROOPER

*In the 82nd Airborne, I was better than any guy in my company. Over here I gotta hustle just to keep up.*
*—A DELTA trooper*

Troopers delivered to a Navy submarine by an MH-60G Pave Hawk.

Joining a counterterrorist unit is similar to breaking into the big leagues of pro sports. But there are a few differences. Major league ball clubs have quite a few rookies on the squad, whereas CT units require veterans with basic special operations skills already refined to a razor's edge. And an error in the major leagues won't anyone's life.

CT units are composed of senior noncommissioned officers (NCOs) and several well-qualified officers. Continuous assignments in such units have not always been career enhancing, and despite the Army's recent elevation of special forces to full branch status, few officers stay around for more than one or two special forces tours. Those who do are usually *extremely* dedicated to their units, their troops, and the basic idea that the worldwide terrorist threat and its network of supporters should be met head-on and eliminated. The men charged with carrying out low-visibility CT operations are chosen from a wide range of backgrounds. Each is selected based on his talents and the unit's specific needs.

Soldiers using the Stabo technique land on a Fort Bragg rooftop. Hanging free from the helicopter during their approach, the men land simultaneously instead of one at a time. The target area is framed with a 2x4 barrier in case any of the soldiers loses his footing.

## Selection and Training

Special operations units—especially close-knit counterterrorist units—recruit in several ways. As with other occupations, word of mouth, networking, and personal recommendations are key. DELTA recruitment teams visit training centers, troop posts, and facilities such as the Command and General Staff College and NCO advance schools. These recruitment drives precede DELTA's fall and spring selection and assessment courses. Recruitment letters are also routinely mailed from Army personnel centers, and, as the unit's existence becomes more openly recognized, volunteers have been openly solicited in Army journals.

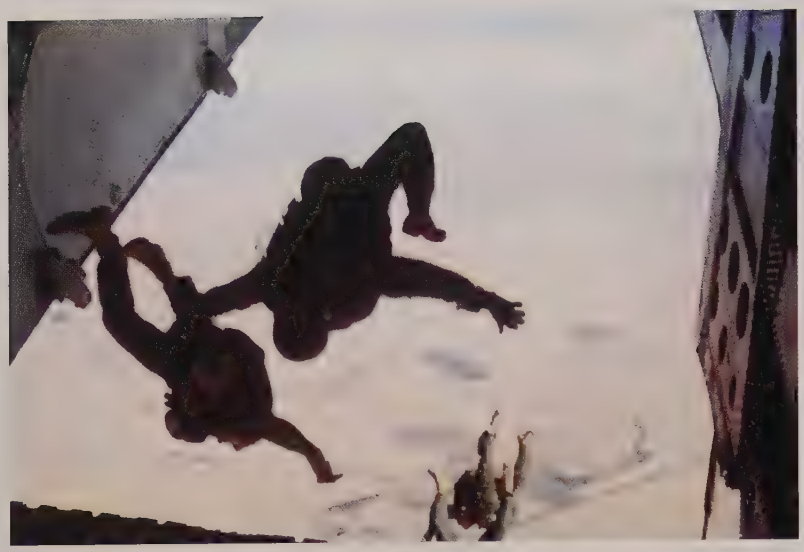
Soldiers are also individually recruited, based on a screening of their official records. Recruiters look for specific assets, such as language skills, key past assignments, military qualifications, or schools attended. From the compiled list of likely candidates, individuals are contacted and invited to volunteer.

DELTA's rigid entrance requirements are clearly spelled out for career officers and NCOs who may be enticed to leave their current postings for a new adventure. The pitch is always straightforward and unambiguous:

"ASSIGNMENT OPPORTUNITIES are available in the 1st Special Forces Operational Detachment–DELTA. DELTA is the Army's special operations unit that has been organized to conduct missions that combine rapid response with the surgical application of a wide variety of unique skills and the flexibility to maintain the lowest possible profile of U.S. involvement. . . . DELTA gives commissioned and noncommissioned officers unique opportunities for professional development. . . ."

Drawn from the active Army, Army reserve, and Army national guard, all DELTA members must pass a background investigation, be at least 22 years old, male, and a U.S. citizen. Each soldier's records are screened for psychological abnormalities and recurring discipline problems, and those accepting the challenge receive very thorough physical and eye examination. Commonly referred to as the Scuba/HALO physical, it is akin to the in-depth exams pilots receive.

After getting the thumbs up from the doctors, or "chancre mechanics," the prospective counterterrorist is subjected to a



All DELTA trainees are jump qualified, and previously acquired skills, such as scuba diving, are further refined during training. Troopers are assigned to specialized teams containing soldiers with the same skills, and many teams and elements are multidisciplined. A high-altitude, low-opening (HALO) team exits the rear of a C-141.

battery of tests to determine if he is psychologically sound. The cost of omitting extensive psychological tests was graphically displayed in Munich in 1972. At one point, the terrorists moved into the sights of the German sharpshooters, who then froze.

Approximately 100 prospective counterterrorists receive intensive physical testing every session, and high scores are an absolute requirement. DELTA's selection process closely follows the British SAS model, because those who helped set up the unit had worked closely with SAS special forces.

The candidate's ordeal begins with six grueling events that must be completed within the allotted time for a minimum of 60 points for each event. The candidates are, of course, expected to do better than the minimum. Volunteers are expected to complete: a 40-yard inverted crawl in 25 seconds; 37 sit-ups in 1 minute; 33 pushups in 1 minute; a run, dodge, and jump course in 24 seconds; a 2-mile run in 16 minutes, 30 seconds; and a 100-meter swim while fully clothed and wearing boots.

Following the test, the candidates complete a speed march by traversing an 18-mile course as rapidly as possible. Since this is a psychological and a physical challenge, the passing times are never published. But many who have passed it agree that 10-minute miles are almost too slow!

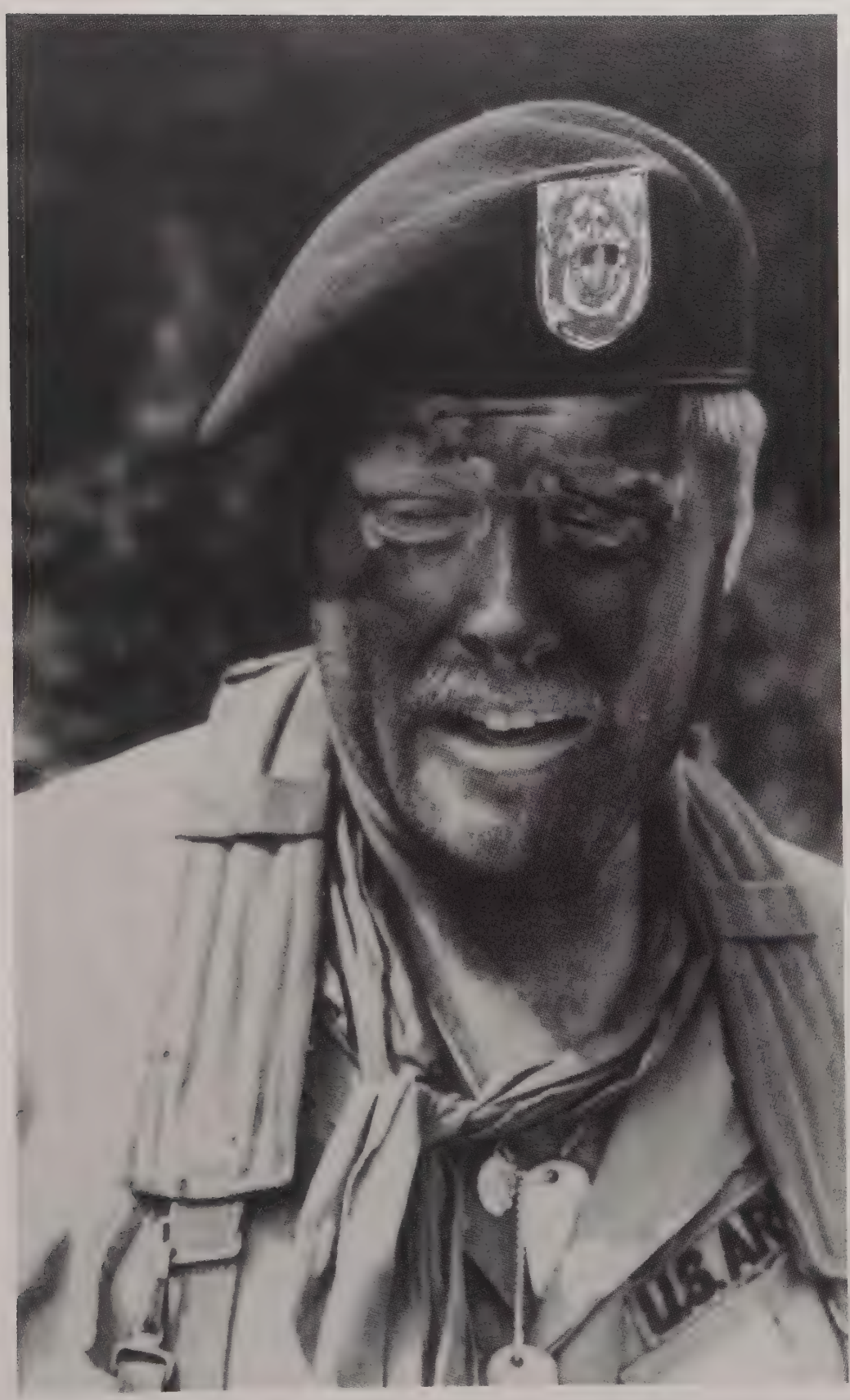
Just like in the SAS course, the candidates have to show what they're really made of and are taken to one of several sites for a combination speed march, compass course, and survival exercise. These tests are now conducted on the rugged terrain of Camp Dawson, West Virginia, and a site has recently been added in the secured areas of Nellis Air Force Base, Nevada.

## The Freedom to Fail or Succeed

If you were one of the few candidates to reach the 40-mile land navigation exercise, you'd find that the basic scenario goes like this: With all the ceremony of going off to a maximum-security prison, you and the other candidates are trucked out to the test site and dropped at separate starting points. As dawn breaks, you are given a set of instructions that amount to little more than a compass heading and a point on the map marking the final destination perhaps a half-dozen miles away. You are to select your route, and get there as quickly as possible.

Your thoughts run the gamut from, "What the hell am I doing here?" to "I hope I can pull this off." Even though you made some rough calculations at the start, you drop off to the side of the trail to ensure your initial calculations are correct. The map is hard to read, and harder to interpret, but you settle into the comfortable trot they taught you back at Bragg's Smoke Bomb Hill or Fort Benning. It starts to rain, but for the airborne, Ranger, or special forces type, rain is not a stranger. In most cases, the trial would be more enjoyable if you didn't remember that this was much more than just an exercise. You are here to show that you can hack whatever it takes to be part of DELTA.

As you navigate the trail, the shoulder straps of your 55-pound rucksack pinch and bind. Sweat trickles down your armpits, blurs your vision, and pools between your legs. After about 90 minutes, your experience from ranger school, the special forces qualification course, and numerous special forces




An instructor from the John F. Kennedy Special Warfare Center training group, exhausted after negotiating a demanding confidence course like DELTA's. He is indicative of the highly motivated, professional soldiers in the U.S. special operations community.

A trainee negotiates stairs to a room mock-up during entry-technique training at the special operations training (SOT) facility. The object is to engage the pop-up silhouette from uncomfortable angles while in motion.

group exercises takes over. So it's time to stop, review the situation, and drink some water. You look around the dense hardwoods and sense something in the underbrush near your left foot, and you slowly retreat a few steps as "Jake no shoulders" rattles a friendly greeting.

Moving down the trail, you get out of the drizzle, change your socks, and apply some Vaseline to your groin. You get your bearings and are off. Whether running the selection course in Appalachia, with its mountains, forests, and streams, or driving on in the Sierra Nevada wastelands, the expected results are the same. Just like General Forest, get there "firstest with the mostest." In your case, get there fastest—period.

You've been at this all day. The sun dipped below the wooded hills uncounted hours ago, and at each rendezvous you hope that you'll be told to throw your ruck into the truck and get aboard. But for some bizarre reason, all you hear at each brief stop is the location of your next rendezvous. After about 12 hours of this, many volunteers rest too long or slow down so much that they can't beat the 20-hour time limit. Even good soldiers begin to look for excuses to quit, and many inevitably find them. But not you. Cold, wet, and numb with exhaustion, you move off again, continuing on until well after midnight, when you are unceremoniously informed that the exercise is over. The survivors rarely remember where they've been, how far they went, or how long it took.

By now, steady attrition has weeded the field down to a dozen or so. Many were cut because they couldn't meet the challenge, while others were sidetracked for other reasons, such as knee, ankle, and back injuries. The NCOs overseeing the

A trainee practices pistol shooting at multiple targets at one of the special operations training (SOT) facility's numerous ranges. Note the semi-crouch stance and two-handed pistol grip.

selection course steadfastly refuse to provide encouragement, and some soldiers drop out because they simply weren't mentally prepared to complete the course without the you-can-do-it encouragement that that was part of previous training. DELTA makes a great effort to ensure that those not selected know that they are *not* failures. Each dismissed candidate receives a certificate of training and is simply told that he wasn't selected.

The physical demands of the selection process are structured to put maximum psychological pressure on the candidates. A candidate must be able to use his physical, mental, and emotional strengths to his advantage. In the life-and-death reality of counterterrorism, you get only one chance to succeed. As Sun Tzu said, you have to know yourself as well as your enemy. If you are not ready to know what real fear is, to meet it head on and beat it, DELTA is not for you.

The trip back to Fort Bragg is surreal, and the exhausted candidates now have to face the final and, according to some, hardest part of the selection process: the interview, in which a board of DELTA veterans grills the survivors.

"So you're infiltrating an unfriendly area prior to taking down a terrorist hideout. Say you come across two little girls. You can't leave them. Do you take them along, tie them up, or kill them?"

"Tell us a little about Machiavelli."

"What were the arguments for and against our acquiring the Virgin Islands during World War I?"

"Was President Truman right or wrong to fire MacArthur?"

After four hours of this, some volunteers resemble frightened animals. The questions are serious, and serious answers are expected.

"Well, Sergeant, you've given a fine performance so far. Now tell us what you tend to blow it on."

"Why should we take you? What can you offer DELTA?"

"You're a good soldier!? So what!? Sergeant, we're up to our ears in good soldiers. Tell us about your unique skills, what you're really good at that's not military related."

In this tension-charged atmosphere, there are few right or wrong answers. The board is looking at the whole individual, including his values and how he handles himself under pressure.

An American counterterrorist team practices pistol shooting from several different positions. Ranges such as this one provide enclosed areas to practice room-clearing methods out of sight of prying eyes.

The objective is to find individuals who can both work with the team and yet operate independently without orders. In the end, only about 10 percent of the initial candidates make it into DELTA. Nevertheless, DELTA remains focused on the quality, not the quantity, of personnel entering the unit.

## The SOT

The staff sergeant reports to Fort Bragg for some of the finest—and toughest—training in the world. He drives to the Special Operations Training (SOT) Facility, a multimillion-dollar complex built with support from Congress and the president for the war on terrorism in the early 1980s.

The SOT unfolds in the form of large two- and three-story buildings and training areas for heliborne insertions, and it's surprising that virtually anyone can get a look at this well-publicized facility.

The newcomer then passes the numerous open-aired and enclosed ranges where he'll train for the next two years. A thrill rushes through him. This is going to be the ultimate adventure! He pulls up to the brick guardhouse, the guard compares his ID to the incoming roster for the day, and he's directed to park and await his escort.

Everything the trainee has seen so far speaks well of the command emphasis placed on the Army's counterterrorist mission, from the White House down through the major subordinate headquarters, the Joint Special Operations Command (JSOC). As DELTA's newest recruit waits for his escort, he is startled to see an MH-6 zoom overhead. Along each side is a trio of soldiers buckled into special side platforms for rapid egress. Just a moment later, the six commandos slip wearily from their Little Bird onto a helicopter pad near Lambert Road.

This specially modified Hughes chopper belongs to another important part of the team, the 160th Special Operations Aviation Regiment (Airborne), or SOAR. This unit is a result of the many problems experienced during *Desert I* and objectively outlined in its after-action review (AAR).

A counterterrorist operative demonstrates how to use a shotgun during a window entry.

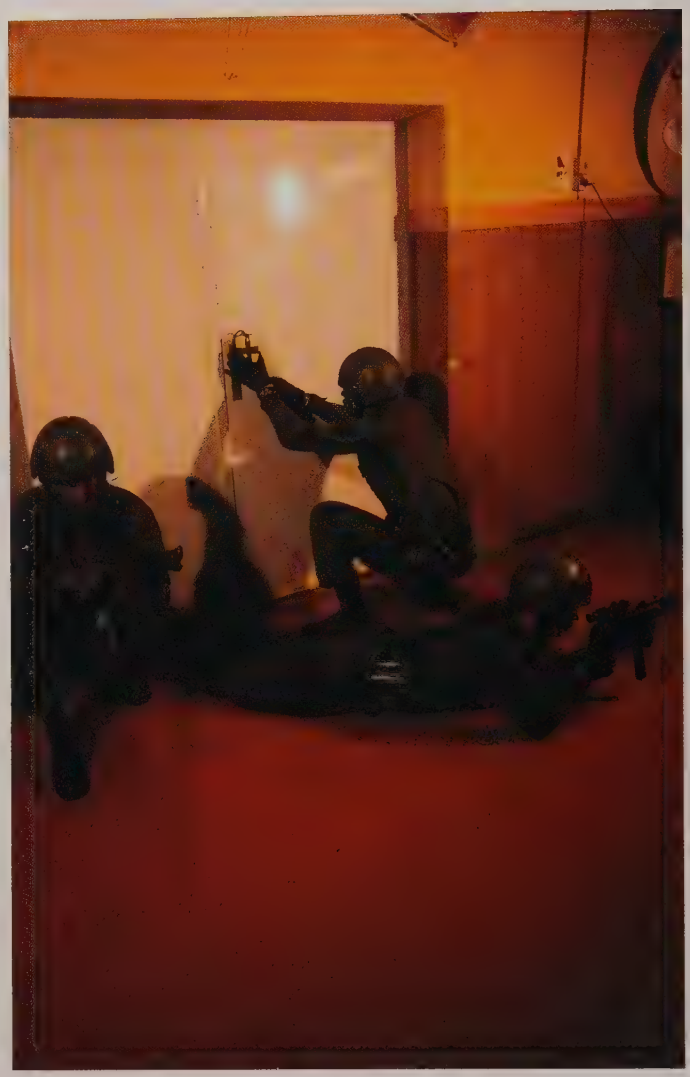
Commonly referred to as the Holloway Report, the AAR pointed out that a major area to restructure, if future missions were to stand a chance, was helicopter operations, and the covert aviation unit was duly formed at Fort Campbell, Kentucky. Originally named Task Force 160, it soon became the major U.S. Army aviation support element for DELTA.

The commandos clearing the aircraft have darkened faces and wear a patrol, or ranger, cap. Clad in olive drab jungle fatigues and specially made vests and other web gear, they also carry rappelling gloves, snaplinks, and nonstandard Heckler & Koch MP5 submachine guns. As the SOAR 160 bird rises back into the sky, its stubby, rounded frame looks like an overweight bumblebee attempting to gain flight.

The facility's mission is to teach new methods and refine old skills in the art of counterterrorism. Some have referred to eliminating a terrorist situation as antiterrorism, but antiterrorism refers to the skills and techniques used to help prevent terrorist attacks. Schools and courses teach basic antiterrorist methods and tactics, but the SOT addresses the final options of dealing with a terrorist incident that has already occurred. This is counterterrorism— DELTA's prime mission. Most CT operations require lightning-fast target-area entrances, which are intended to shock and disorient hostage takers. Carrying out such complicated maneuvers requires intensive training, teamwork, and mutual respect for everyone's abilities. These are the things new recruits will learn in DELTA's five-month operators' course.

Many will argue that specialized units for CT operations are too expensive. But even decades ago—well before the terrorist attacks of 9/11—it was obvious that a successful terrorist strike is devastating at multiple levels. Economic costs alone can top tens of millions of dollars, and priceless, innocent lives are put at risk or lost. The configuration of individual CT

A close-up of a "best-case" anchoring system, with abundant safety features. In the heat of a fast-paced takedown, such fine points often have to be bypassed.



An assault team conducts a forced entry. Lock picking is conducted with a charge of C4 plastic explosive.

units is decided by each country, but one piece of the equation remains firm: Counterterrorist skills are highly perishable and must be kept at razor's edge if teams hope to succeed. Appropriate training and constant study of the enemy's methods, personnel, and organization are an absolute necessity. The needed skills and support apparatus require substantial manpower and resources, but countries must be prepared to accept the costs, which are a pittance compared to the economic and human devastation wreaked by even one successful terrorist strike.

A CT operation has several distinct phases. First, the unit must get to the area of operations—hundreds or even thousands of miles away—by reliable, secure transportation. Simultaneously, immense amounts of intelligence must be collected, analyzed, and disseminated by supporting agencies. A critical issue at this phase is who is in charge. The Army's Special Operations Command (SOCOM) supports DELTA's training and related operational requirements, but, in time of crisis, JSOC bypasses the SOCOM link and directs the unit and the nation's other CT assets. Once deployed, the state department is the key decision-making element for foreign operations, while the justice department deals with problems within the United States. This simple chain of command allows a stovepipe of direction and support to the unit and cuts out a number of middlemen who would unintentionally hinder a mission's execution.

After arrival, the next phase is preparation. In its simplest form, target surveillance is begun; outer and inner security rings

If you can't go through the door or a window, go through the wall! Two U.S. operatives prepare to follow the blast into the next room.

are checked; command, control, and liaison functions are established; and incoming intelligence is analyzed. After all the players are satisfied (or the situation forces the issue), the next phase is the assault, or takedown, of the objective. Finally, swift withdrawal returns the force to its home base.

In this scenario, the new trooper is likely to fill a number of roles, and his titles may be many. As he progresses within the organization, he will use his past skills and experiences to benefit each team he is assigned to. For example, he may be a sniper because he went to sniper school while assigned to a ranger battalion. If his demolitions background is good, he may work with some very exotic toys designed to blow off the smallest locks or take down the entire wall of a room with minimal disturbance to occupants in the next room. As a door-kicker or shooter, his skills will be fine-tuned in the art of lockpicking, room entry, and target identification.

The SOT teaches troopers various methods of entry, seizure, and exit. They learn to rappel into second- and third-story windows to reach terrorists and their victims, and how to kick open a door, use stun grenades to disorient the terrorists, and then closely follow the blast into the room. Each member of a four-man team must know not only where he is going, but also precisely where his teammates will be and in what direction their fields of fire are directed.

In the closely orchestrated ballet of death known as close-quarters battle (CQB), the troopers learn to pick their targets quickly and then instantly place a minimum of two shots in an eye socket–sized kill zone from as far as 50 feet away. This technique is known as the double tap. Moving quickly through the area, the team secures everyone with plastic flex cuffs and leaves the sorting out and medical treatment to the follow-on police forces.

This is the type of assault that most people associate with counterterrorist forces. During a takedown, terrorists and hostages alike see only dark apparitions entering behind the stun or flash/bang of grenades. Every trooper is completely clad in sophisticated armor. Heads are protected by Kevlar helmets identical to current military issue. Under this Fritz helmet is a flame-resistant Nomex balaclava. An earphone and/or micro-

"Walk-throughs" of room-clearing operations are run with troopers wearing progressively more equipment so the men will gain a clear idea of how different combinations of gear restrict vision and movement. They must attain extreme levels of proficiency—including expertise with personal weapons—while wearing a variety of equipment combinations. Troopers in coveralls prepare to enter a special operations training (SOT) facility "killing house" **Opposite:** to perform their ballet of death. Note the mannequin terrorists and hostage in closet.

phone provides instant tactical communications. Everyone involved in the decision-making process and execution must be provided with real-time information in order to control the unfolding operation.

Depending on the situation, a trooper may also wear eye protection in the form of shatterproof goggles or a protective chemical mask. His upper torso is encased in a Kevlar vest, for gunshot and blast fragmentation protection, over a dark Nomex coverall or tactical battle dress. Over this, a variety of general equipment is worn, along with items that will support his specific tasks. Some troopers will have ammunition and myriad survival aids, such as powerful miniature flashlights and radio receivers. Others will have a variety of grenades, ammo, knives, and first-aid equipment. When medical assistance is not immediately available, CT teams carry a medical pouch containing assorted dressings, IV tubing, saline solutions, and tourniquets.

Individual weapons are dictated by each situation. Everyone has a favorite, but training on all available CT weapons is required. Most room entries begin with the lead man using a submachine gun or a semiautomatic pistol. To expedite door-kicking procedures, shotguns fire a sabot or lead slug to blow off the barrier's hinges. Many insist that a submachine gun or a shotgun, which can be carried in one hand, is the ideal weapon, and some even mount laser pointers or mini flashlights on their weapons for operations in dimly lit conditions. Plenty of ammo is always strategically placed.

Regardless of equipment, each man is aware that one lucky shot or well-placed booby trap can ruin the best-laid plans. From the soles of his Gore-Tex assault boots to the crown of his Kevlar helmet, the DELTA trooper's equipment is constantly reviewed and updated.

Training generally falls into two categories. First the FNG (f—ing new guy) will go through individual skills training

Two special operators aboard an MH-53M prepare to conduct a water drop.

designed to break conventional army habits, such as not shooting outside of prescribed safety limits, and much emphasis is placed on individual action and initiative. New habits are instilled in the FNG, such as the double tap, used when a pumped-up terrorist in the midst of a takedown cannot be talked into surrendering.

Once this basic training is completed, the FNG enters the team training phase where he's taught how to handle himself in close-quarters battle whether in a building, on a train, or on an aircraft. For example, the trooper will be given his first taste of an aircraft takedown in a large mockup of a civilian passenger jet at the SOT before training on a variety of actual aircraft supplied by the major carriers at various sites around the country.

Additional CT training teaches infiltration methods for moving into isolated target areas. These include high-altitude, low-opening (HALO) or high-altitude, high-opening (HAHO) parachuting, underwater rescue operations using scuba techniques and miniature submersible vehicles for long-distance travel, and rappelling and fast-roping from helicopters. Teams may also learn techniques for driving various all-terrain vehicles.

Upon completion, the FNG is assigned to a team, and honing his new skills begins in his troop. Regular cross-training occurs with related foreign and domestic CT units, such as Britain's SAS or our own Navy SEAL (Sea-Air-Land) teams. Some DELTA troopers will also find themselves temporarily assigned to personal protection duty, providing security to key U.S. personnel, such as ambassadors in Central America and the Middle East.

## The Killing House

"Take a break, you heroes." The team sergeant chuckles to himself every time he uses that line. If everything goes as it should, his jibe would either cause a rush of catcalls or a deep-throated moan from the assembled trainees. This time, the muted response indicates that the humid North Carolina weather is sapping the team's strength. More importantly, it was a good indicator of what they should do for the rest of the day. The team sergeant adjusts the training schedule and walks through a room-clearing exercise without the required live ammunition. Training accidents are acceptable but are not sought after.

Fifty meters to the west, a second and much more experienced team just finished with its own room-clearing exercise, and the men are given one of the most beloved commands in the military lexicon: "Take a break."

It's a 30-minute break, but the team members think it should be longer. Sprawled under the pines, each trooper tries to find a comfortable position while trying to keep his equip-

**Opposite page:** "Hang on!" A search-and-rescue para-jumper, or "PJ," of an Air Force special tactics squadron is hoisted along with his patient out of a secure landing zone.

The business end of a special operations soldier's 5.56mm M4 with all the bells and whistles. Note the tactical vest, body armor, and blood type attached to his left sleeve.

ment away from the grit and sand. Rivulets of sweat trickle down grimy faces as Nomex gloves are removed and calloused hands brush the sweat away from bloodshot eyes. Each man wears an assault suit of black Nomex, and some already removed their Kevlar helmets and flashproof balaclavas. Goggles, used to protect against flying debris, lie in the crown of the helmet, along with sweat-soaked gloves and face masks. The team members take care to switch off individual communications earpieces and microphones.

Each trooper wears body armor to protect his throat and chest and armored shorts to protect his vulnerable groin area. Some troopers add knee and elbow pads under their assault suits, and some wear shin protectors to avoid bruises and cut shins from the furniture-cluttered killing house. Troopers are equipped with either a special-purpose Mossberg automatic shotgun or a 9mm Heckler & Koch MP5 submachine gun. Most of the free world's CT forces swear by this weapon, and some argue that it's the best German export since fräuleins, Mercedes-Benzes, and beer. The sniper teams on this exercise are also equipped with M24 sniper rifles. Though there are more advanced systems, the accurized Remington 700 bolt-action rifle with five-round fluted, detachable magazine is still the favorite. Its stainless-steel barrel and hefty .300 Winchester Magnum round provide the power required to reach out and touch someone. All members of the sweeper team carry the 9mm Beretta Model 92F pistol, the standard sidearm of the U.S. Army.

While some troopers smoke and joke over the break, others chug nourishing liquids from canteens and jugs. Like each man's love for his personal weapon, each also enjoys anything liquid, including Gatorade, spring water, juice, or plain tap water. Unlike Hollywood's image, hard-drinking troopers are not the norm.

At the end of the break, the team sergeant growls, "Saddle up, you assholes." Staff Sergeant Dawkins hated it when the sergeant major used his hard John Wayne voice, and comments sarcastically, "I really wonder if John Wayne ever called anyone an asshole." Troopers grumble as they rise to their feet and adjust their equipment. Gathering around the team leader, Sergeant Major Greg Tusconey, the men fall into a loose formation facing their boss.

Looking up from his notebook, Sergeant Major Tusconey begins with an in-depth critique of the morning's exercise. He cites their strengths as well as their weaknesses. When finished, he faces his soldiers and says in a matter-of-fact tone, "OK, girls, let's get our shit together and try it again." The resounding reply to being called girls is indicative of a team that can give as much as it can take.

Returning to their briefing area, the team members arrange themselves on wooden benches placed in front of a graphic representation of the rooms in the killing house. A key factor in these exercises, as well as in actual assaults, is the need for accurate and up-to-date information about the physical layout of the operation site, as well as the locations of the hostages and their terrorist keepers. Stepping in front of the diagram, the sergeant major describes the mission for the team in clear, concise, and pointed terms:

"At 1730 hours last night, terrorists assaulted the U.S. Embassy and took 16 state department employees as hostages. Two U.S. Marines were killed during the initial assault. We are to prepare for a deliberate takedown of the building on order from higher." Stopping to scan the team for questions, he continues. "Outer security has been established by the local police, and inner security has been established by the hasty response team from the 10th Special Forces Group until after we arrive and take over responsibility for the mission. Recon of the building has been conducted, along with a debrief of our people and the locals who have solid, current intel."

Tusconey proceeds to outline the rehearsal schedules and timetables and how he envisions the takedown. After the briefing is completed, troopers are quizzed and then individual and team rehearsals are begun. As the last rays of the fading sun are engulfed by the approach of a cool, wet front, the final preparations are completed. For this exercise, chopper support will come from the 160th SOAR.

The team is divided into sniper and assault elements to coordinate the operation's precise timing. The two sniper teams each consist of a spotter and a shooter. They are linked with the assault team, sweeper team, and command center by radio. Each sniper team moves along individual routes previously reconned and takes positions offering vantage points overlooking the target area. The assault element, meanwhile, moves toward their pickup zone (PZ) to rendezvous with an inbound chopper. Word circulates that the order has been received. The mission is on.

Because this is night operation, infrared reflective tape is applied around each member's chest, wrists, ankles, helmet, and equipment. Using AN/PVS-7 night-vision goggles (NVGs), all assault members will be easily seen in the heat of night combat. The team divides evenly and prepares to board the chopper. Like a giant dragonfly, the MH-60 Pave Hawk glides into the PZ, where the team immediately loads through the side doors. The pilot's eyes are unaided but his copilot wears aviator's AN/AVS-6 NVGs. Immediately, the team leader places the spare set of headphones over his ears and communicates with the pilot.

"Evening," says the pilot in a slow, Southern drawl.

"How's it going?" replies the sergeant major.

Formalities exhausted, Tusconey quickly briefs the aircrew on how the team will carry out the infil as the aircraft nears the target. Due to the lousy weather, the landing zone (LZ) will be the building's sloping rooftop, and the team will drop onto a very small area at its peak, where a flat space has been located during photo recon analysis. Normally, the team would rappel or fast-rope in, but the wet weather and reduced visibility give them an added advantage and they'll be able to get closer to the target. With clockwork precision, the Pave Hawk angles into the rooftop LZ and flares out level and steady. Looking through his NVGs, Tusconey sees that everyone is ready, and in a low, distinct voice says, "Stand by, stand by." Prompted by his warning, the sniper teams report in: "Sniper One, ready. Target sighted." "Sniper Two ready. No target." At his hand signal, the lead team members prepare to exit. Taking a deep breath, he gives the command, "Go!"

The soldiers leap onto the mist-shrouded roof and fan out across its tricky incline in a predetermined (and well-rehearsed) pattern. Almost as quickly as the bird arrived at the LZ, it disappears into the night. Two team members attach green nylon climbing ropes to anchor points, drop them over the sides of the building along predetermined entry sites, and kneel in anticipation after attaching their snaplinks. Six other men move to a rooftop door and, after determining that it's locked, move into a tight file along the outside wall. The door hinges will have to be shot off.

Ten seconds since the team landed: At the command, "Go!" the number one man, armed with a Mossberg 12-gauge

After entry, the team fans out along the walls before picking targets.

shotgun, blasts the offending hinges off the wooden door. Yanking the door to the side, the number two trooper rapidly steps into the doorway, where he immediately places his back to the dimly lit stairwell wall. Sweeping the staircase with his NVG, he alerts follow-on troopers to the situation he is observing. Number three now bursts through the doorway and, in calculated steps, moves down the stairs and secures the top-floor stairwell. Peering down the hallway, he clearly and rapidly speaks into his microphone: "Number three, hallway clear." Trooper number four is immediately at his side, having followed his partner down the stairs. As number three moves to the right, number four moves left and blends into the darkened hallway. Both troopers' H&Ks move in measured arcs: ceiling to floor, left to right. Whenever a trooper's eyes move under his NVG, the stubby barrel of his MP5 follows, ready to spit out a lethal three-round burst along that same visual arc.

The second assault element of four men moves along the right side of the hallway toward a door on the right. The lead man (number three) senses motion in the room. Reaching down along his left thigh, he extracts a pop can-sized flash/bang grenade from his leg pouch. Bringing it up to his right hand, which still clutches an MP5, he slides the grenade's pullring over his gloved thumb. While holding the safety spoon, he pulls the ring. Gently rolling the grenade into the room, he flattens himself against the wall as he warns his teammates. "Grenade" reverberates through the soldiers' earphones and, almost immediately, "Go!" is commanded before the nonlethal grenade has expended its package.

Number five slides into the left side of the doorway as the room erupts in multiple flashes and explosions designed to disrupt, disorient, and illuminate. As he moves through the door, number six follows and slides into the smoke-filled room along the doorway's right wall. He is followed by numbers seven and eight, who had entered the floor through windows on the other side of the building. Number seven backs number five by taking on any targets from his twelve- through three-o'clock (the right hand wall). Number five already has acquired a target through his NVG in his twelve- through nine-o'clock area along the left wall.

A masked terrorist is wildly trying to bring his AK47 assault rifle to bear on a young woman strapped to a chair near

the center of the office. Number five squeezes a three-round burst into the throat of the terrorist, who goes down in a spasmatic heap.

As number seven checks the terrorist for other weapons and vital signs, number five maintains a steady aim on the lifeless corpse. Flipping the terrorist over on his stomach, number seven expertly pins his wrists together with flex cuffs. After a quick check of the room, numbers six and eight now check the bound female for booby traps. More than one rescue has ended in disaster when the rescuers failed to check for explosives secreted somewhere on a hostage. A grenade or stick of dynamite can turn a rescue into a tragedy. After the check is completed, the team exits the room. Eight seconds have passed. As the leader leaves, he announces, "Number two, one terrorist down, one hostage secured, main room, top floor" to the command post and other team members. Now it's up to the sweepers and backup police forces to take charge of the room.

This process will continue until the "embassy" is cleared of terrorists and all the hostages are accounted for. After the team exits the building, they move to an assembly area and are whisked away for an in-depth debriefing. If this had been a real takedown, actual terrorists and hostages would be considerably more unpredictable than the mannequins and pop-up targets the team had to deal with. Local police, medical personnel, and the sweepers would have also been moving simultaneously through the building to deal with the carnage left behind and make a complete record of what happened.

During such exercises, the trooper is trained not to act like Rambo: Never fire from the hip and always extend your folding stock. Fire at close range and don't waste ammo. You learn how to move: Dropping to a crouch, firing, dropping and firing again, and moving to the next position. You learn to move quickly through doorways and get in position and maintain proper trigger control.

Chapter 4

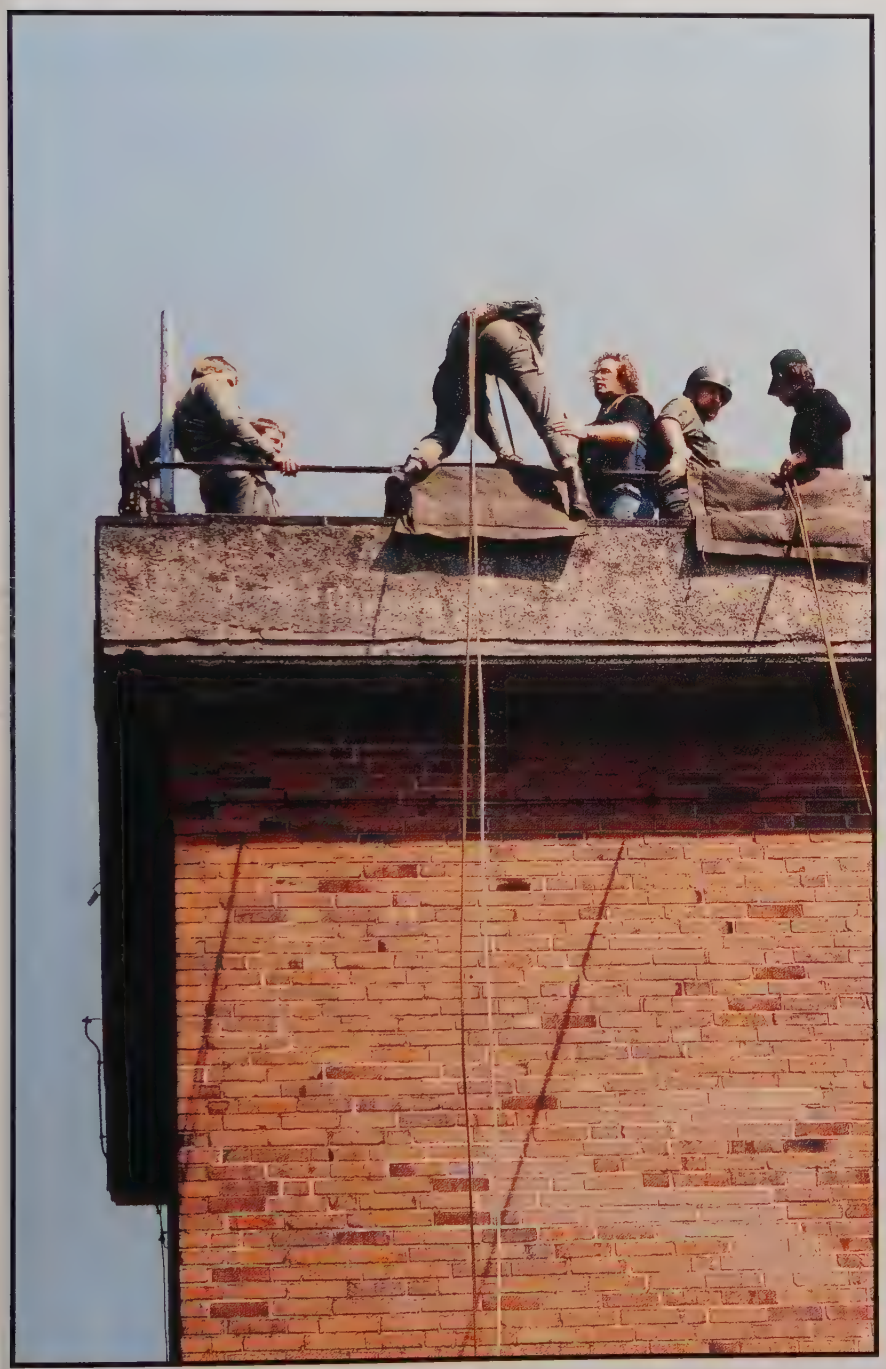
# DECADE OF FRUSTRATION

*General [Bernard] Rogers told me of a note from the president. It had surfaced in the tank earlier in the day [October 18, 1977] and asked, "Do we have the same capability as the West Germans?" Much discussion ensued before it was decided that we did not. One of the generals present had said, "Well I'm not going over to the White House to tell him we don't."*

*—Colonel Charlie A. Beckwith, U.S. Army (Retired)*

A U.S. flag burns on the Rhein-Main Air Base perimeter fence during a period of mass left-wing demonstrations and terrorist strikes against American targets in Germany.

Throughout the 1980s, DELTA faced a number of events that might have caused lesser organizations to collapse. The troopers trained hard but were seldom deployed. They watched helplessly as Americans were whisked from streets and university offices in Beirut and seized in large groups in hijacked airliners and ships. Worse yet, the men geared up for numerous rescue operations that were canceled. During this time, the unit also received a disturbing amount of unwanted publicity. In addition to a highly publicized financial scandal involving DELTA members, easy access to the Special Operations Training Facility (SOT) may have been a factor in the media's knowledge of deployments during several hostage crises.



A DELTA trooper gives a German counterterrorist a hand before he disappears over the edge.

Although it's shocking to think that a unit on the cutting edge of America's war on terrorism was—and still is, in appearance at least—so vulnerable, it was only one factor among many that plagued counterterrorism. In addition to the security problems associated with CT operations, interdepartmental squabbles and convoluted command-and-control issues abounded. For example, the FBI is responsible for handling terrorist incidents at home, yet DELTA has to supply badly needed backup. The 1986 Statue of Liberty Centennial in New York City and the 1984 Olympics in Los Angeles, in spite of numerous jurisdictional and legal problems, provided the models for DELTA's continuing assistance at major domestic events.

When overseas CT operations are planned, numerous diplomatic issues become critical, and the state department steps to the forefront. A most basic question that must be asked before contemplating foreign operations is: What sovereign nation wants to relinquish command and control to United States military forces conducting such highly visible operations on their soil? No matter how discreetly DELTA may conduct itself in the run-up to an operation, every hostage rescue is a high-visibility operation *after* its well-publicized conclusion. The implication for the nation hosting DELTA is that it doesn't have the resources to take care of its own internal problems, which can have significant domestic, international, and political ramifications. Add to this mess the fact that

the Joint Special Operations Command, the direct link between DELTA and the president (known as the National Command Authority) and the Joint Chiefs of Staff (JCS), can receive marching orders from both. The JCS is better qualified to oversee operations involving DELTA, but common sense remains a missing ingredient, as can be seen by the less-than-desirable results in Grenada.

## Operation Honey Badger—Aftermath

The fallout from the inferno of *Desert I* was complicated and far reaching. Not only did President Jimmy Carter lose his bid for re-election, but Egypt's supportive president, Anwar Sadat (who was already on a number of hit lists for his part in the Camp David Accords), was now a principal target of Iranian-sponsored fanatics for allowing the Great Satan to launch Operation *Eagle Claw* from his country. Sadat would soon die at the hands of Muslim fundamentalists.

JCS planners continued their work, and soon a new mission to rescue the hostages in Iran, code-named *Honey Badger*, was put together under the direction of the renowned and much-respected General Richard Secord. Armed with the proper special operations support—and the hard-learned lessons from *Eagle Claw*—he assembled a powerful force of special operations aviators, special forces and DELTA troopers, intelligence collectors, and agents who were prepared to go it again. But it was not meant to be. On January 19, 1981, some two minutes after Ronald Reagan was sworn in as President of the United States, the hostages were released.

One of the more interesting aspects to emerge from planning and coordinating for Operation *Honey Badger* was the structuring of special operations aviation and intelligence support. Task Force 160 emerged as a special operations aviation unit that would gain international fame in the 1990s and early 2000s. The intelligence requirements were already in place with

Counterterrorist specialists must be able to use any ruse or disguise to get close to hostage-holding sites, such as aircraft or buildings. Here, U.S. Army counterterrorist operatives display equipment and disguises during a briefing for General Bernard Rogers, supreme allied commander, Europe, in the early 1980s. (A) One of the typical "European businessmen" holsters his 9mm Beretta pistol and (B) a "street cleaner," standing beside a "municipal worker," shows off his protective vest and ammunition belt. Note the equipment on display.

a unit known as the FOG. The Foreign Operating Group was a special operations unit initially formed to deal with U.S. Embassy force protection issues. The CIA was unable to support DELTA operators, and in order to support future operations, the Pentagon saw FOG as a solution to the need for signals and human intelligence (SIGINT and HUMINT), as well as personal security problems. The unit was redesignated as the Intelligence Support Activity (ISA).

To help dampen the firestorm of criticism that erupted after *Desert I*, a six-officer review group was appointed by the chairman of the JCS, General David C. Jones. It was chaired by Admiral James L. Holloway, and the balance of its membership consisted of generals from the Army, Air Force, and Marines with experience in either special or clandestine operations.

The investigators concluded that *Eagle Claw* was plagued by untested operational methods, poor communications procedures, and a dangerously informal command structure lacking unity of command. Training for the mission, moreover, had been conducted by its various components at different sites without a full dress rehearsal using all the assigned elements—something that would have highlighted the most glaring operational and equipment shortfalls. The commission recommended that "a permanent field agency" of the JCS be established with "assigned staff personnel and certain assigned forces" and that a "murder board" of military experts be formed to independently examine mission plans before execution.

As for Colonel Beckwith, he was asked by General Meyer to formalize an earlier proposal for a permanently operating joint task force that would fall directly under the JCS and combine dedicated Army, Navy, and Air Force elements during its training and planning. Beckwith and others had long voiced the opinion that this type of organization was needed, and Major General John Singlaub put it best when he stated that *Eagle Claw* didn't work because, "We tried to bring disparate units from all over the armed forces—from all over the world—and then put them into an ad hoc arrangement to do a very complicated plan."

Beckwith's proposal to establish a Joint Special Operations Command (JSOC) was approved by Meyer in May 1980, and Beckwith was soon transferred from DELTA to the newly formed, independent organization he helped create. He missed the excitement of leading a combat team, though, and remarked that his staff billet "ain't as good a job [as DELTA]." Beckwith retired in 1981.

DELTA's friends in high places went to even higher places, and the post-Beckwith organization thrived. The unit, with about 100 men making up two small squadrons plus support before *Eagle Claw*, grew to a relatively stable force of 300 during the early 1980s—enough for three full-sized squadrons. The unit also benefited greatly from the new *Tasks, Conditions and Standards for DELTA*, or the Black Book, which was produced only because General Meyer forced Beckwith to compose it.

Meyer, now the Army's chief of staff, was anxious that DELTA not reinvent the wheel with each new commander and wanted it to retain its SAS-type structure, one that is unique within the Army. Four troops of approximately 16 men make up a squadron, with each troop able to reconfigure itself into eight-, six-, four-, three-, or two-soldier teams or elements. This degree of flexibility is key to DELTA's ability to handle virtually any terrorist scenario.

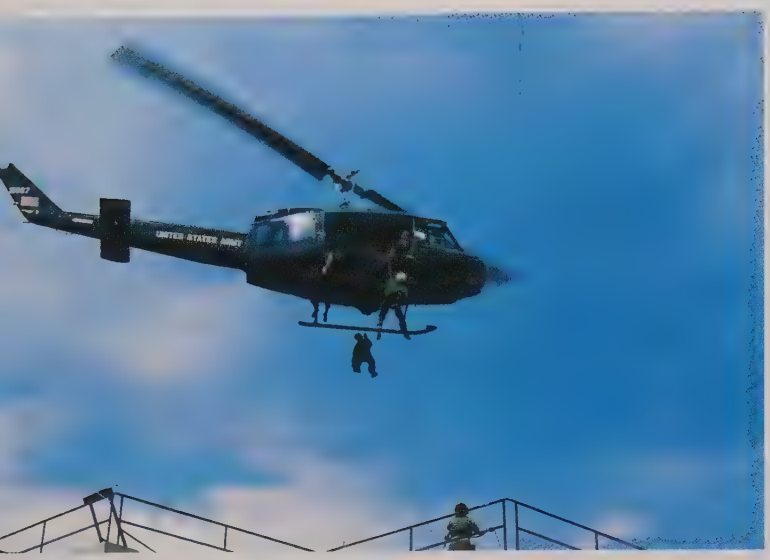
DELTA also moved its headquarters from the old post stockade to the new state-of-the-art SOT, nicknamed "Wally World." But it wasn't just DELTA that came up a big winner from the increased awareness of the terrorist threat. The whole military benefited as the obvious candidate to receive new funds. And the funds did flow: to Air Force special operations, Navy SEALs, Army aviation, Rangers, and special forces, as well as a large supporting cast in the various services, such as the Army's Intelligence Support Activity (ISA).

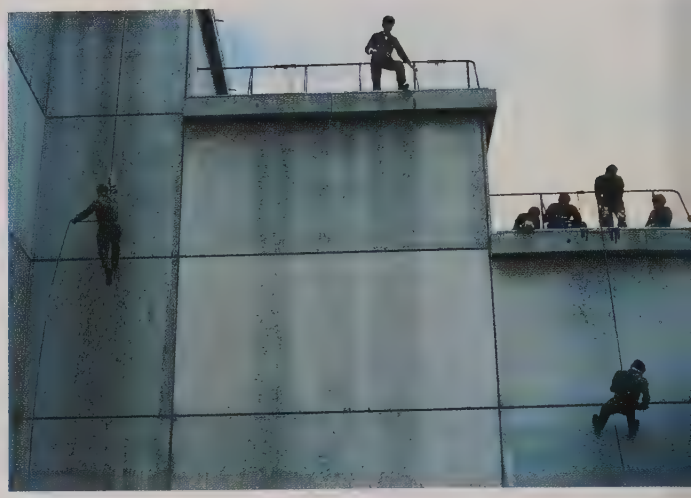
The state department, however, would soon emerge as the biggest winner. Being in the best position to judge the political ramifications of U.S. actions on a host nation's territory, it received the responsibility for overseeing all overseas counterterrorist operations. But though the United States now had a well-organized CT apparatus in place, the future would not be rosy.

## Operation *Urgent Fury*

After Ronald Reagan became president in 1981, he "let it be known to friend and foe alike" that he had learned from the hard lessons of his predecessors. Surrounded by capable and, in some cases, hawkish advisors, Reagan was determined that, like the sheriffs of the Old West, he would clean up the world and make it safe for women and children. All he needed was a place to start and the force to sweep up the mess. He didn't have long to wait. At the southern end of the Antilles chain lies the beautiful Caribbean island of Grenada. A former ward of the British Empire, this idyllic 8- by 15-mile island was to be the testing ground for the new president and the changes that had been made in the special operations community since *Desert I*.

On October 19, 1983, Grenada's Marxist prime minister, Maurice Bishop, and several cabinet members were executed by





**Above:** U.S. and GSG-9 counterterrorists conducting joint training at a West German site. A classic procedure in building clearing is for a team to rappel to a roof from a helicopter, then work its way from top to bottom, outside to inside. Such operations require split-second timing and in-depth coordination. Note that this special ops UH-1N Huey, though painted black for night operations, is clearly marked as an American military helicopter for any German operatives taking part in a joint takedown.
**Right:** After rappeling down the building side, a U.S. operative prepares to enter a window. His teammate has already successfully completed this tricky maneuver. During actual operations, there is always the risk that an unexpected greeting awaits the team.

former associates who formed the even more radical Revolutionary Military Council. Bishop had aligned himself with the Soviets and their Cuban surrogates, who had, among other things, constructed a large military communications facility, a 10,000-foot runway capable of handling long-range transports, and extensive airfield support facilities, ostensibly to support its meager tourist industry. While a single air base would not allow a hostile force to control the entrance into the southern Caribbean during a war, it would provide an excellent stopover for aircraft bringing in material and personnel support for "peoples' revolutions" in Central and South America.

With the execution of the genuinely popular leader, widespread protests broke out on the island and, when the military opened fire on the demonstrators, the die was cast. The threat to the region caused an uproar among the neighboring Caribbean nations, and the Reagan administration believed that a radical Marxist government that thought nothing of shooting its own citizens would, sooner or later, use the 600 American students at the island's medical school as pawns in a dangerous game to keep the U.S. military from closing down the airfield. This was a hostage situation waiting to happen, so the United States moved quickly to launch Operation *Urgent Fury*.

Special operations elements had a primary mission to secure and protect U.S. and allied citizens from hostile Grenadian and Cuban forces. The secondary mission was to assist in the airfield seizure, which would expedite the arrival of follow-on forces. Leading the assaults were several of the U.S. military's elite and (until then) classified units. UH-60 Black Hawks of Task Force 160 flew directly from the United States to a nearby island launch site with the help of additional internal fuel tanks, while MH-6s were brought in by Air Force cargo planes. During the early morning hours of October 25, the expert aviators of Task Force 160 ferried their ground counterparts, DELTA, to targets near the airfield at Point Salines, where they were to carry out a direct-action mission ahead of two ranger battalions parachuting in at dawn. Their target was the airfield control facilities which, it turned out, were heavily ringed by misplaced, but marginally effective, automatic weapons. A second mission

entailed the takedown of Fort Rupert and Richmond Hill Prison, where DELTA participated in the assault to free selected Grenadians and any U.S. citizens being held as a result of the coup d'etat. One Black Hawk was lost to Soviet-made ZSU-23-2 (twin 23mm) antiaircraft guns. Men and aircraft were lost and some figures are still classified. The lack of timely, on-the-spot intelligence had again reared its ugly head.

Several members of the elite Navy SEAL Team Six have privately related that they had an especially rough time as DELTA and the Task Force 160 units were running into their own problems in the south. One deadly incident occurred when four SEAL team members parachuted into rough seas to conduct a linkup with a surface vessel that was to take them in close for a water infiltration. The drowning of these four men didn't stop the mission, but it tragically demonstrated that even the best sometimes cannot overcome the odds.

A major concern was the safety of the British government's representative. Tasked to keep him from being captured by the Revolutionary Armed Forces, 22 other members of SEAL Team Six flew in by chopper, fast-roped onto the rooftop and grounds of the governor's residence, and took control. A stunned Grenadian defense unit summoned help from two Soviet-supplied BTR-60 armored personnel carriers mounting multiple machine guns. The sudden appearance of substantial hostile elements hastily ended the evacuation of Government House. With neither antiarmor weapons nor good communications, the team held out as best they could until a Specter gunship came to their rescue. But even with the help of the AC-130's massive firepower, up to half of the rescue party is reported to have been wounded by the time Marines reached them.

Months later, a veteran SEAL discussed the operation, "Thank God it was just the Grenadians. Every time some nonqualified son of a bitch plans or directs our operations, we get our asses handed to us on a silver platter. It just ain't right." The end result of *Urgent Fury* was that closer control over special operations planning would, at least for a while, be handled by thoroughly qualified people.

Although the Army refused to either confirm or deny the use of Special Operations Forces for nearly eight years, ABC News was able to extract a concession that one Task Force 160 captain was killed and 11 DELTA troopers were injured after broadcasting footage of the downing of a Black Hawk—an event previously unaccounted for in the Pentagon recap of the operation. An American resident of Grenada had shot the film; other footage showed MH-6s, aircraft for which no procurement information had been publicly released. ABC News identified them as Hughes 500 helicopters, their civilian designation.

After the operation, increasingly bitter complaints over the secrecy surrounding special operations were heard from some quarters of the media. There was also the dubious claim that only the American public was being denied access to information, since the Soviets supposedly already knew about such activities. While this will continue to be a subject for debate, even relatively low losses can have a severe impact on a small unit's capabilities. And if the small unit performs a mission of vital strategic importance, that loss may be magnified a hundred-fold. Not only do Western intelligence agencies monitor terrorist networks, but the terrorists themselves monitor CT organizations, with the assistance of friendly governments that track Western units and capabilities through press reports and espionage. It is not in the best interests of the United States to reveal losses in key covert units within days—or even months—of their occurrence. In this case, freedom of information must take a back seat to security.

## Trouble in the Mediterranean

On the heels of *Urgent Fury*, members of the Italian terrorist Red Brigade abducted U.S. General James L. Dozier from his apartment on December 17, 1982. Authorities would later learn that Dozier was not the intended victim; a Navy admiral had been the group's actual target. Regardless of who was snatched, the impact throughout Europe was the same—virtually ever senior officer viewed himself or his family as a prime terrorist target.

Against this background of confusion, experts from various special operations units converged on Italy. To their credit, the Italians told everyone to kindly go home since this was their turf. But while all door-kickers were sent packing, they did keep some special operators who could assist with such exotic needs as radio and telephone intercept.

With the help of U.S. signal-intercept personnel, the Italians located and rescued the kidnapped general, and American CT "experts" learned one more lesson about dealing with the real world.

In 1982, Iran sent roughly 2,000 fanatical Revolutionary Guards to the Lebanese free-for-all civil war as "volunteers." While many of them would perish in regular combat against Christian militiamen (and leftist Shiites, Druz militiamen, renegade Palestinians, U.S. Marine snipers, and Israeli, Lebanese, and Syrian soldiers), a select few would meet their

The U.S. Marine Corps barracks, Beirut, Lebanon, seconds after a suicide bomber detonated an explosives-filled truck. Lebanese rescue workers and U.S. Marines search through the flattened barracks. The terrorist drove directly past Marine guards who had been ordered not to carry loaded weapons. There were lessons to be learned: Listen to the warnings of counterterrorist specialists, and shoot first and worry about CNN later.

The television image of a TWA pilot being prevented from talking with reporters by an armed hijacker at Beirut airport in June 1985.

fate in a less conventional manner. These "martyrs" drove explosive-laden trucks into barracks, embassies, and other high-priority targets. On the night of April 18, 1983, 40 French paratroopers and 241 U.S. Marines were killed by a pair of these truck bombers after failing to heed the lessons of a similar attack on a U.S. Embassy building earlier that year.

Another incident in late October 1983 involved members of the 10th Special Forces Group who were billeted in a downtown hotel while training and advising the Lebanese army. The group's commander, Colonel Richard Potter, was warned that the group's quarters were targeted for yet another suicide bombing. Potter, DELTA's former deputy commander and a veteran of *Desert I*, was not about to let such warnings go unheeded and immediately moved his force to a Lebanese army base north of the city.

On December 4, 1984, DELTA was sent to assault a Kuwaiti airliner hijacked on its way to Pakistan. Two American passengers were killed during the incident, and the aircraft was forced to fly to Iran, where the terrorists and hostages were released before the unit could intervene. Six months later, on June 14, the unit returned to the region for an assault on TWA Flight 847, but the affair ended before they could be employed; one off-duty Navy serviceman on board was murdered. DELTA failed to come to grips with terrorists again during the *Achille Lauro* affair in October, and the resulting fiasco at Sigonella Naval Air Station, Sicily, again illustrated that the Italians zealously maintained jurisdiction on their own turf.

The Palestinian extremists who commandeered the *Achille Lauro* had been persuaded to leave it at Alexandria, Egypt, in return for safe conduct to friendly Tunisia, where the PLO maintained its headquarters. They left Egypt by commercial passenger jet immediately ahead of DELTA's arrival, but the jet was quickly intercepted by U.S. F-14 Tomcat fighters, which diverted it to the U.S.–Italian air base. Once the airliner was forced to land, it was quickly surrounded by Navy SEALs, who were, in turn, surrounded by Italian *carabonari*, who also blocked their C-141 with security vehicles. Since both groups were attempting to carry

# Rotary- and Fixed-Wing Assets

The Holloway Report on Operation Eagle Claw laid bare the grievous deficiencies in special operations aviation that contributed to the disaster at Desert I, and chief among them was the lack of interoperability between the armed services. The conglomeration of hardware fielded by special operations aviation was the most visible manifestation of this shortcoming.

Throughout the early 1980s, special operations aviation soldiered on with an unwieldy mix of helicopters. Depending on the mission (and what was available), a DELTA trooper might find himself working with CH-3 Jolly Green Giants, CH-53C Sea Stallions, UH-1N Twin Hueys, CH-47D Chinooks, some newer (and extensively modified) UH-60A Black Hawks, HH-53B and C Pave Low IIIs, and substantially upgraded versions of the OH-6A Cayuse called AH-6 and MH-6 Little Birds. One highly capable helicopter that DELTA could not count on using, except, perhaps, in the most extreme emergency, was the RH-53D of Eagle Claw. The Navy's entire fleet of this countermine version of the Sea Stallion amounted to only 24 aircraft before a half dozen were lost in the Dasht-e Kavir, severely degrading the fleet's mine-sweeping capabilities. They had been tapped for the mission because the stretched HH-53s, specifically designed for special operations, were too long to fit in the elevators of most aircraft carriers without time-consuming rotor blade removal, a problem that persists today.

Members of all armed services generally agreed with the Holloway Report's findings, and some organizational, equipment, and training improvements were made. Under pressure from Congress, the Department of Defense attempted, unsuccessfully, to put an end to interservice rivalries by advocating

**A Pave Low Jockey wearing AN/PVS-5A night-vision goggles. Even relatively lightweight goggles require that a counterweight be attached to the back of a pilot's helmet, and after a year of night flying an airman's collar size often increases a size or two from the increased exercise of the neck muscles.**

that the Army become the sole operator of rotary-wing special operations assets, while the Air Force continued to develop its long-range fixed-wing capability. Although this particular proposal went nowhere fast because of both congressional backpedaling and continued resistance within the Air Force to anything that would cut into its turf, the future security of the nation was immeasurably enhanced by passage of the 1987 Defense Authorization Act, which established a unified command incorporating the Special Operations Forces from all services. The new Special Operations Command (SOCOM) could train and deploy forces throughout the world and was given the authority to develop and acquire equipment, services, and supplies peculiar to special operations. Of particular interest to DELTA was funding and authorization to modify existing aircraft and develop new helicopter variants.

Under the act, the UH-60 Black Hawk would be reconfigured into three basic models to support all services. The Army's 160th Special Operations Aviation Regiment (Airborne), SOAR(A), would use the MH-60K Pave Hawk to replace its less-capable MH-60As* in the assault role; the HH-60H Rescue Hawk would enhance the Navy's search-and-rescue and special warfare capability; and the Air Force MH-60G Pave Hawk would both replace aging search-and-rescue aircraft and act as an armed escort for the new MH-53J Pave Low IIIs just entering service. All aircraft would be provided with tiedowns to allow shipboard operations.

The L variant Black Hawks, with their more-powerful engines, upgraded transmissions, and hover infrared suppression subsystem (HIRSS) did not enter service until 1988. All MH-60As and many UH-60As have since been retrofitted with the HIRSS.

The newest Pave Low III variant of the CH-53, called the MH-53J, was tasked to perform the heavy-lift rotary-wing effort for the near future. A superb special operations aircraft, it is, unfortunately, rather short-legged, and even with the addition of a 600-gallon fuel bladder, it requires frequent air refueling during long missions. Congressional sponsors of the 1987 legislation—as well as the Air Force hierarchy—envisioned that it would be phased out of special operations and into search and rescue as MH-47Es came on line.

The special operations variant of the venerable heavy-lift CH-47D Chinook would complement the MH-60K's mission. Unlike the Pave Low IIIs, MH-47Es can easily fit into the elevators of all aircraft carriers and, thus, offers planners more deployment options. The MH-47E also has an avionics system interoperable with its smaller cousin and can engage in full and open competition with the CV-22A Osprey for long-range strategic special operations missions. Unfortunately, the extremely versatile tilt-rotor Osprey, which incorporated the lift, range, and speed of a fixed-wing transport with the vertical-lift capability of a helicopter, remains plagued by mechanical difficulties.

Unlike other special operations helicopters, the AH-6 and MH-6 Little Birds were not dealt with in the published versions of congressional defense appropriations until recently. These descendants of the trusty old Cayuse were developed and fielded through the use of covert funds in much the same way as the F-117 stealth attack aircraft and, interestingly, started to edge out of the black at approximately the same time as the F-117, primarily because of their high visibility during the 1987–1988 retaliatory attacks on Iranian targets in the Persian Gulf and the 1989 overthrow of Panamanian dictator Manuel Noriega.

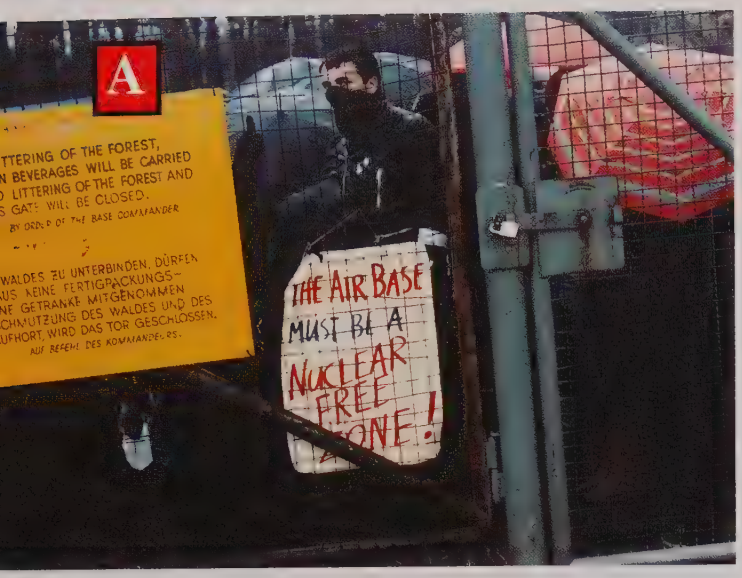
The 160th SOAR aviators, which carry out these operations, are known as the night stalkers because of their effective use of darkness during missions, and many of these pilots have logged 2,000 or more flight hours wearing night-vision goggles. The regiment, headquartered at Fort Campbell, Kentucky, is composed of four battalions: the 1st with 18 AH-6s, 18 MH-6s, and 30 MH-60s (incorporating the forward-deployed 617th Special Operations Aviation Detachment [Airborne] in Panama); the 2nd with 24 MH-47s; the 3rd with 10 MH-60s and eight MH-47s, based at Hunter Army Airfield, Savannah, Georgia, to support the 1st Ranger Battalion as it did during the Grenada operation; and an Oklahoma National Guard battalion, the 1/245, based at Tulsa, Oklahoma, with more than three dozen aircraft, including 15 UH-60Ls, which will eventually be replaced by MH-60s.

out their orders and apprehend the hijackers, a tense situation developed between the senior U.S. officer present and Italian officers. The situation quickly degenerated, and the *carabonari* drew their trusty Berettas on the equally well-armed SEALs until diplomats intervened, explaining that it was in everyone's best interest to let the Italians take charge.

Yet another incident occurred the following month, when a commercial airliner was hijacked to Malta by Palestinian extremists. This time, DELTA was on hand but not used. In fact, DELTA was initially not even allowed to land. Since the hijacked aircraft was Egyptian, that country's commandos, trained by U.S. special operations personnel, were allowed to conduct the takedown. Things turned sour, and 57 hostages lost their lives.

## Troubles at Home

From 1970 through the mid-1980s, more than 1,000 Americans were killed, taken hostage, or otherwise injured by foreign terrorists. Virtually all of these incidents occurred overseas, but



Throughout the 1970s and 1980s, terrorists in Germany were like fish in a sea of nationalist extremists and sympathizers. (A) A masked demonstrator protests outside the U.S. air base at Rhein-Main, and (B) an arms cache believed to have been hidden by Germany's Red Army Faction. Terrorist groups rely heavily on hidden caches of arms and other supplies.

The unmarked limousine of General Frederick Krossen, commander of U.S. Army forces in Europe, after a failed assassination attempt by Germany's Red Army Faction in September 1981. Only a month earlier, the general had finally heeded the advice of West German counterterrorists and obtained the special armored Mercedes that deflected the blast of a Soviet-made rocket-propelled grenade (RPG) away from the car's interior. In the car was the general, his wife, an aid, and a German driver/bodyguard.

CT planners believed that a terrorist attack could occur on American soil. The 1984 Los Angeles Summer Olympics was an awfully tempting target. As part of the $1 billion effort to provide security against possible attacks, DELTA deployed to a nearby naval facility and stood ready to counter any terrorist situation. Along with DELTA was a massive CT force incorporating city and state SWAT (special weapons and tactics) teams and the FBI's hostage rescue team (HRT).

Not all monies funneled through Army covert accounts were spent wisely or even legitimately. Army auditors discovered a number of irregularities in a covert account between 1981 and 1983. A disturbing amount of double-dipping had taken place, with a hot-air balloon and a Rolls-Royce purchased to supposedly support clandestine operations.

In a climate that one DELTA member described as sheer hysteria, standard cost-accounting techniques were applied to ongoing covert operations and training. The result was dozens of reprimands and perhaps a score or more transfers as nonjudicial punishments in lieu of court-martials. But some soldiers, deservingly, weren't so lucky. In one case, an ISA lieutenant colonel who supported DELTA created a firm as a conduit for covert funds and misappropriated more than $50,000 in just six months. In a series of discreet court-martials and a civil criminal trial running through 1986, at least two officers were sentenced to prison.

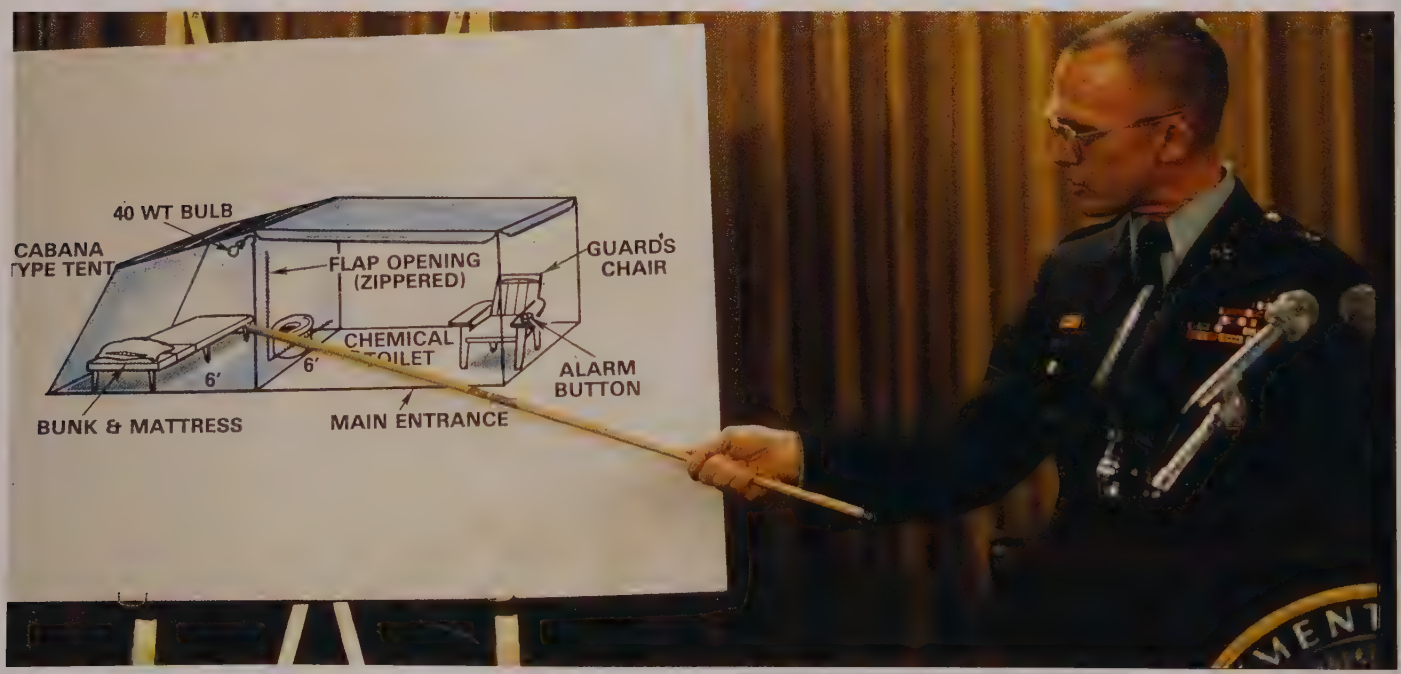
For most DELTA troopers, though, life continued its grueling hurry-up-and-wait pace. Troopers provided advice and support to CT units around the world, and a team was quickly dispatched to Willemstad, Curacao, in the Dutch Antilles, to assist in the takedown of a hijacked Venezuelan DC-9. Both fanatics were killed and 79 passengers were freed. Meanwhile, in Lebanon, kidnappings continued unabated and two hostages were murdered: CIA station chief William Buckley in 1985 and Marine Colonel William Higgins in 1989. Frequent movement of hostages and the lack of solid U.S. intelligence sources within the terrorists' camp prevented rescues attempts, and at least one major DELTA /SEAL operation was scrubbed.

Sometimes a scrubbed mission was good news, such as when the vulnerable Statue of Liberty centennial celebration passed without incident in July 1986. On other occasions, events took care of themselves—as in San Salvador and Manila. On

MH-6 Little Birds of the 160th SOAR operating in the Persian Gulf. Among other operations, they took part in the September 1987 capture of an Iranian mine-laying vessel that threatened oil tanker traffic.

A West German wanted poster for known terrorists. As various fugitives were apprehended or killed, they were crossed off the poster by the U.S. counterterrorist team that mounted it on their headquarters' wall.

West Berlin police sift through the rubble of the La Belle discotheque, a bar popular with American servicemen, where a soldier and several Turkish women were killed by a bomb. Intelligence analysts soon discovered that the explosives were planted by Libyan agents based at their embassy in communist East Berlin.




General Dozier's kidnappers erected a tent inside a safe house room to hold their prisoner. Dozier displays a diagram of the tent and nearest guard position after Italian counterterrorists forcibly freed him from the Red Brigade.

November 21, 1989, DELTA was dispatched to the Salvadoran capital of San Salvador to rescue Green Beret trainers trapped in the Sheraton Hotel during a guerrilla offensive. The trainers escaped unharmed, however, before the detachment could be put into action. Almost two weeks later, DELTA received another alert for a possible rescue attempt, this time in the Philippines. American citizens were trapped by an army coup d'etat, but emerged unscathed when the revolt fizzled.

Berlin presented a more interesting—and long-lasting—problem for U.S., as well as British and French, CT units stationed in the city's Western sectors. Along the seven crossing points through the Berlin Wall, Communist East German border guards, called *Vopos*, checked passports to prevent East Germans from passing into the West, while British, French, and American guards allowed people to pass unimpeded both ways, since they didn't, for political reasons, view East Berlin as a foreign territory. So potential terrorists could simply cross into the West from East Berlin, where the Syrians, Libyans, Iranians, and even the PLO, maintained diplomatic missions. A U.S. hasty-response team was always on a high state of alert, and an active exchange program was conducted with DELTA. They operated in close conjunction with Berlin's other Western security organizations, but could not prevent terrorist attacks like the April 5, 1986, bombing of the La Belle discotheque, a club frequented by many American

(A) The U.S. Army's hasty response team in Berlin and several DELTA troopers pose for a group photo during a break in a training exercise. (B) During antiterrorist training in West Berlin, an American serviceman is snatched by a group of mock terrorists.

## MH-47E Chinook and MH-60 Black Hawk Variants

The MH-47E's highly advanced integrated avionics system and extended range allow it to complete clandestine deep-penetration missions. The aircraft can easily use map-of-the-earth tactics at night and perform in any weather conditions while placing a minimum workload on the pilot. Special operations enhanced UH-60 Black Hawks have performed spectacularly in long-range combat operations from Grenada to Iraq. All of these helicopters wear infrared-suppressing paint.

**MH-60G Pave Hawks conduct an in-flight refueling operation.**

**Beginning in the early 1990s, MH-60 Pave Hawks have performed spectacularly in long-range combat operations from Grenada to Iraq. All of these helicopters wear infrared-suppressing paint.**

servicemen, in which two people were killed and 230 were injured. The twilight world of terrorism and counterterrorism, espionage and counterespionage, did not end until the East German communist system finally collapsed of its own weight, bringing the Berlin Wall down with it.

Throughout all the frustrations and false starts, DELTA troopers maintained their high degree of professionalism and managed to keep their sometimes-irreverent sense of humor. All knew that the beeper clipped to their belts could beep at any time to signal a recall and they'd casually drop whatever they were doing with an offhand, "Looks like it's time to head on back to the Ranch,"* and disappear out the door.

## Operation *Just Cause*

A public affairs release from Operation *Just Cause* stated simply that all units from the special operations command participated. DELTA's most publicized mission was the rescue of an American businessman and rotary club member held in

*continued on page 79*

(A) The MH-6J Little Bird that lifted Kirt Muse to freedom is moved out of the street by U.S. mechanized forces after they secured the area around General Manuel Noriega's headquarters. Note the three-man troop seats along each side and the large crane-like appendage for fast-rope operations. It folds forward against the side of the bird when not in use and inadvertently prevents an easy exit from the interior's right side. (B) The battered *Comandancia*, located just across the street from Muse's prison cell. *Soldier of Fortune*

# MH-53 Pave Low III

The MH-53H and MH-53J Pave Low IIIs are descended from a long line of Sikorsky helicopters that have performed rescue and special operations from the Korean War through Vietnam and through the aborted 1980 raid to free American hostages in Iran. Of a family that is second only to the Soviet-built Mi-26 Halo in size and heavy-lift capability, the Pave Low III is capable of operating with pinpoint accuracy in all weather and light conditions. It also shares many components with other Air Force assets, such as the forward-looking infrared (FLIR) on the AC-130 Specter gunships and MC-130 Combat Talon transports.

B
600gal internal auxiliary fuel bladder
GPS antenna
Two rear AN/ALQ-162 electronic countermeasures (ECM) antennas
Pintle mount for machine gun or minigun (ramp)
Two AN/ALQ-152(V)2 infrared countermeasures jammers on outrigger pylons
Rescue hoist
Two crash-worthy 650gal external auxiliary fuel tanks
Two pintle mounts for machine guns or miniguns (forward side windows
Two forward AN/ALQ-162 ECM antennas
AN/ALR-69(V)6 radar warning reciever
Retractable inflight refueling probe
AN/APQ-158(V)2 TF/TA radar
Infrared searchlight
AN/AAQ-10 FLIR imager
Plus fast-rope rappelling system, flare/chaff dispensers and SATCO

**Close-ups of a .50-caliber machine gun (A) and 7.62mm mini-gun (B) on pintle mounts bolted to Pave Low III deck ramps. "Ma deuce"—the reliable .50-caliber—continues to provide outstanding service to the special operations community, and the deadly mini-gun has proven its worth from Vietnam to Iraq.**

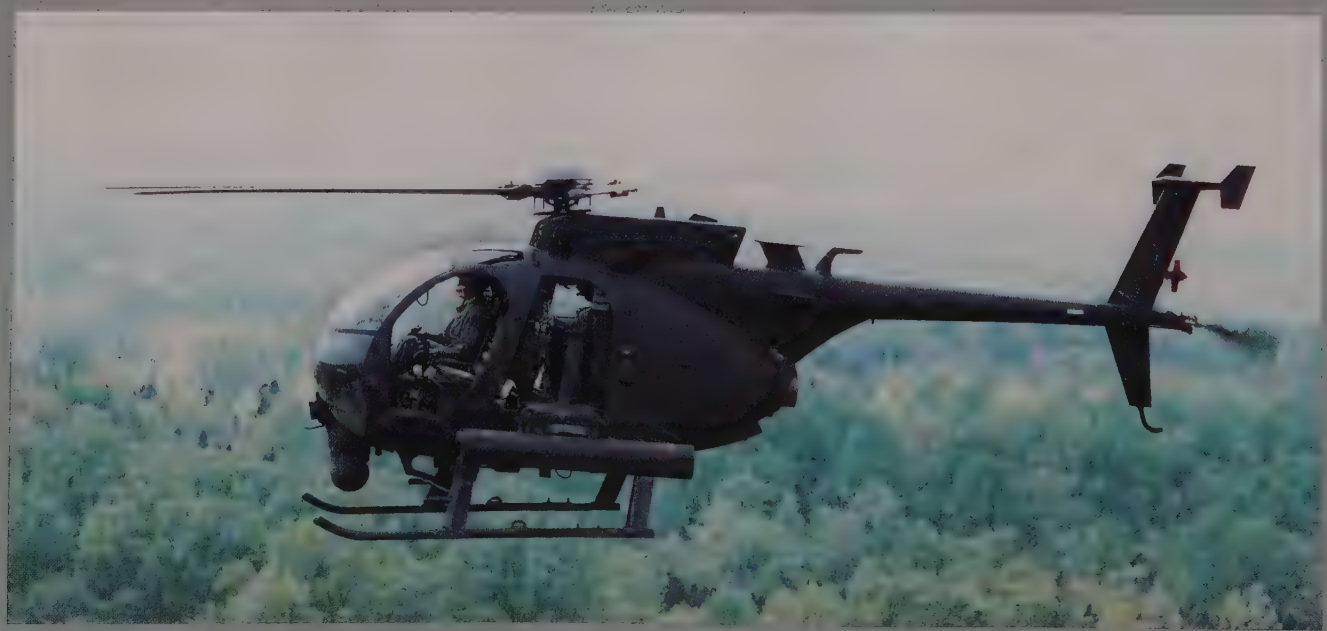
The MH-53H and MH-53J Pave Low IIIs are descended from a long line of Sikorsky helicopters that have performed rescue and special operations from the Korean War through the aborted 1980 raid to free American hostages in Iran. From a family that is second only to the Soviet-built Mi-26 Halo in size and heavy-lift capability, the Pave Low III is capable of operating with pinpoint accuracy in all weather conditions and at night. It also shares many components with other Air Force assets, such as the forward-looking infrared (FLIR) on the AC-130 Specter gunships. (C) An MH-53J Enhanced Pave Low III is parked between two veteran special operations aircraft, the MH-53H Pave Low and the MH-60G Pave Hawk. (D) A team of special operators is inserted by fast-rope operations into the target area from an MH-53H Pave Low.

# Little Bird Variants

Based on an extremely popular airframe that can be found in extensive use by both civilian and government entities in every corner of the globe, the Little Bird offers great agility, adaptability, and its own version of visual stealth if warranted by a mission. The aircraft is manufactured by McDonnell Douglas and carries a basic civilian designation of either MD 500 or MD 530. The 500, 500C, and 500D aircraft were produced with a round bubble-like nose through 1982 when all subsequent helicopters of these types were manufactured with the more pointed nose of the MD 500E, 500F, and 500MG, as well as the slightly larger and more powerful MD 520 and 530 series aircraft. The U.S. Army's orders for these helicopters after 1982, however, have generally called for the retention of the bubble nose to maintain the option of installing a TOW antitank missile aiming sight and to keep visual commonality with the large number of pre-1982, nonmilitary aircraft of this type.

The high civilian and foreign military demand for a small, reliable, inexpensive helicopter was coupled with the manufacturer's effort to fill that demand by incorporating a large variety of powerplant, transmission, rotor, and other changes on what is essentially the same airframe. This proliferation of different aircraft types found its way into the 160th SOAR's inventory since there was never a specific production line opened for the U.S. Army, all purchases being made in bits and pieces over a decade of off-the-shelf buying to supplement the original OH-6A Cayuse helicopters. This proliferation has led to a mind-boggling alphabet soup of aircraft types in the 160th's 1st Battalion, the unit that most directly supports DELTA. Jane's All the World's Aircraft states that the MH-6B and AH-6C are derived from the OH-6A; the AH-6F and MH-6E from MD 500MG; and the AH-6G, MH-6F, and MH-6J from the MD 530MG. "A" designations are given to the heavily armed attack versions of the Little Bird, which can be armed with a variety of miniguns, machine guns, rockets, and missiles. Nearly all Little Birds are equipped with a

**An AH-6 Little Bird pokes its nose into some tight areas looking for terrorist targets.**



(left) A "sterile" 160th SOAR AH-60 Little Bird bereft of any identifying marks; (top) an MD-530N equipped with the NOTAR (no tail rotor) system, including close-up of steering louvers on the underside of the tail; (bottom) and an MD-530N configured for transportation with the louver cone and tail fins folded upward and the main rotor blades stowed along the tail boom. Note that the MD-530 models have both the pointed nose for streamlining and the pre-1982 bubble nose of the MD-500-series aircraft.

swinging crane-like arm for fast-rope rappelling and Stabo operations, and the AH-6G, MH-6E, MH-6F, and possibly the AH-6F, have multifunction displays and forward-looking infrared (FLIR) imagers to be used with night-vision goggles.

Of great benefit to DELTA in urban counterterrorist situations is the 160th SOAR's conversion to the NOTAR system on its Little Birds. NOTAR uses a variable-pitch fan and direct jet thruster to push cool air through longitudinal steering louvers on a circulation-control tailboom. Although early tests by the 160th showed higher-than-desired pilot workloads due to a tendency for the nose to wander at low speeds, yaw-only stability augmentation corrected the problem. With the NOTAR system, AH/MH-6 aircraft display a greatly reduced acoustic signature, increased hover stability, and roughly double the lateral and rearward speeds of conventional helicopters. The absence of a tail rotor also eliminates the danger of tail strikes on ground crews and allows DELTA troopers more freedom of movement around the aircraft during operations.

# AC-130 Specter Gunship

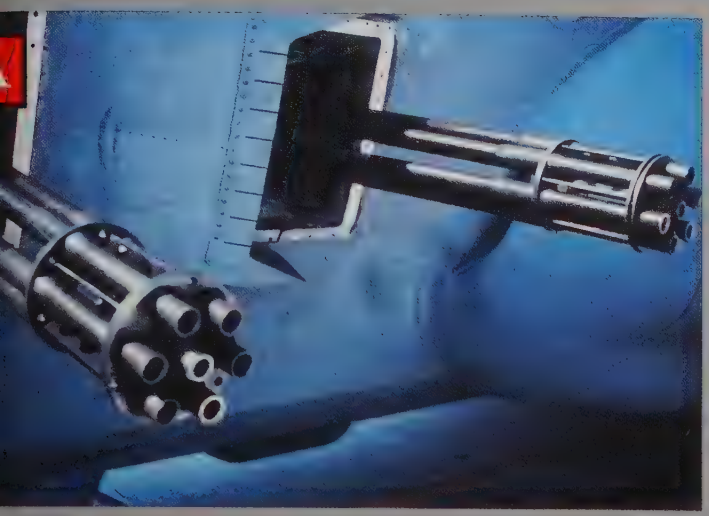
The AC-130 Specter gunship is a basic C-130 modified with side-mounted weapons and sensors that make it highly adaptable to a variety of special missions. When fielded against targets with few antiaircraft defenses and a minimal air threat, the Specter is able to provide close air support much more efficiently than a large force of fighter aircraft and is a particularly effective platform for interdiction and armed reconnaissance missions. The Specter has the ability to aid in perimeter defense, escort, surveillance, search and rescue, infiltration/exfiltration, illumination, and landing zone support operations, as well as to conduct limited airborne command and control functions for other strike aircraft.

The AC-130H is armed with two 20mm Gatling-type guns, a rapid-firing 40mm cannon and 105mm howitzer supported by a laser rangefinder (which can also be used to mark targets for laser-guided bombs), an infrared sensor to identify heat sources such as people and vehicles, a beacon-tracking radar, a fire-control computer, a two-kilowatt searchlight, and a low-light-level television capable of amplifying even faint traces of starlight to monitor both targets and friendly forces. The newer AC-130U models have retained the 40mm and 105mm weapons but use a single 25mm Gatling-type gun fed by a two-canister automated loading system instead of the H models' 20mm guns, which require their linked ammunition to be hand loaded. Other new features have also been added, including the F-15's fire-control radar, lightweight Kevlar armor, inflight refueling capability, and a highly efficient soundproof battle management center.

Depending on the target, threat environment, weather, and desired level of destruction, weapons can be accurately employed at altitudes from 3,000 to 20,000 feet above ground level. The Specter fires from a constant angle of bank and, at a typical slant range of 10,000 feet, the remarkably stable gun platform can deliver ordnance within 10 feet of its target even under conditions of low cloud ceilings or poor visibility. Unlike fighter aircraft, which must make separate runs on hostile forces, targets are continually visible throughout the gunship's orbit and can be fired on at will. But even though the run-in headings required by fighter aircraft are not needed, no-fire headings may be imposed from the ground or automatically computed by the aircrew if there is a risk of short rounds hitting friendly forces from a particular angle.

**An AC-130 Specter lines up a target.**

**The 105mm gun crew on an AC-130 Specter gunship reloads during a fire mission.**



**(A) Twin 20mm Gatling-type guns aft of the cockpit and (B) 40mm and 105mm guns forward of the aircraft's loading ramp.**

The Specter's two-kilowatt searchlight can be used to illuminate targets and landing zones, aid in search and rescue, and supply light for the television sensor if its illuminator is inoperative. In combat, the searchlight is normally used in a covert infrared mode to provide illumination for night-vision devices, since its overt white light mode would easily pinpoint the gunship's position for hostile forces.

DELTA troopers in a tight spot can mark their ground position with a wide variety of items. First, Mk-6 and Mk-25 ground markers can be dropped by hand from the rear of the Specter and will burn for 45 and 30 minutes, respectively. Next, transponders can be picked up by the aircraft's beacon-tracking radar at up to 10 nautical miles, and the powerful AN/UPN-25 and SST-181x transponders can be received by the ship's navigation radar at up to 60 nautical miles. A standard survival vest strobe light with a removable infrared filter can also be used either visually or with the filter installed. The infrared filter provides the same information to the aircrew as the unmasked strobe but prevents visible light from revealing the friendly ground position to the enemy forces. Positive identification is provided by turning one or more strobes off and on in response to radio instructions from the aircrew. The old standby, lightweight 3x5-foot cloth reflective panels can clearly mark ground reference points when illuminated by the Specter, either overtly or covertly.

Panama's notorious Modelo Prison. Kurt Muse was a resident of Panama and, in concert with fellow Panamanian rotarians (dubbed the "rotarians from Hell" by *Soldier of Fortune* magazine), had been causing Panama's strongman, Manuel Noriega, trouble by operating a clandestine radio station, filling the air waves with propaganda and, in some instances, reporting misleading or confusing instructions to the Panamanian Defense Forces (PDF) on military radio frequencies. Muse had been part of a psychological operation (PSYOP) mission against Noriega and was eventually turned in by the wife of a former co-conspirator. He was jailed at Modelo, located a stone's throw from Noriega's command post/headquarters-turned-fortress, the *Comandancia*.

In the early morning hours of December 19, 1989, Muse was rescued by members of DELTA in a classic CT operation. Transported to the rooftop of the prison by an MH-6, the assault team, backed up by a man on the inside who disabled the facility's emergency generator, cleared the upper floors from the top down and fought its way to the holding area where Muse was imprisoned. Armed with MP5s of various configurations, the troopers took out the armed guards with lethal shock and firepower and used just enough explosives to open the door without harming Muse. Two troopers fought their way to Muse's cell, two more provided security on the stairwell, and four more were on the roof, exchanging fire with prison guards in the barracks beyond a small courtyard. The operation, so far, had unfolded with the clockwork precision of a Wally World exercise. As the security and rescue teams loaded into the helo and along its outside-mounted seats, the heavily laden Little Bird lifted into the night sky.

Meanwhile, AC-130s tore great chunks out of the *Comandancia*'s defenses, tracers streamed toward Black Hawk

# MC-130 Combat Talon and HC-130 Combat Shadow

The mission of the MC-130E and MC-130H Combat Talons is to conduct day and night infiltration, exfiltration, resupply, psychological operations, and aerial reconnaissance into hostile or enemy-controlled territory using air landings, air drops, or surface-to-air recoveries. Forward-looking infrared (FLIR) imagers enable aircrews to visually identify targets and checkpoints at night, while terrain-following/terrain-avoidance (TF/TA) radar and an inertial navigation system allow extreme accuracy while navigating to unmarked drop zones. Missions are normally flown at night using a high-low high-altitude profile. The high portion is flown prior to penetrating and after exiting the target area at an altitude that minimizes fuel consumption and enemy detection. The aircraft then descends to the lowest possible altitude consistent with flying safety and uses its TF/TA radar to penetrate and operate in hostile territory.

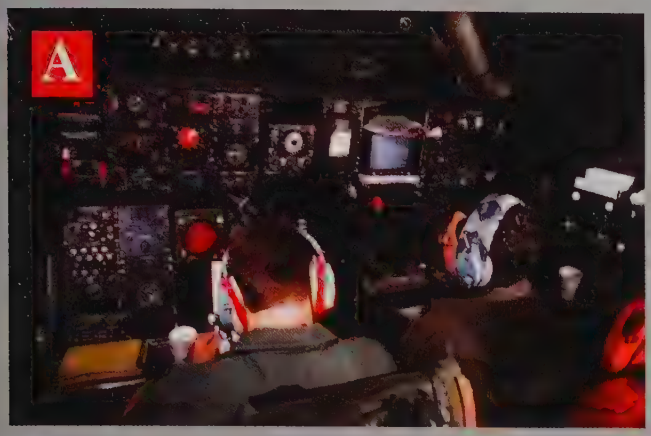
**An MC-130E Combat Talon infiltrates enemy airspace while training for a resupply mission of unconventional forces.**

**A) During a permission inspection, the pilot and crew chief of an MC-130E examine the Fulton Recovery System with the nose prongs extended and (B) the "yoke" retracted.**

The Talon's range depends on several factors, including configuration, payload, en route winds and weather, and the length of time spent at fuel-guzzling low-level flight. For planning purposes, its range (without refueling and factoring in two hours at low level) is 2,800 nautical miles. With inflight refueling, the Talon's range is limited only by the availability of tanker support and the effect that crew fatigue may have on the mission. The Talon is not a rapid-response aircraft. Operating deep in heavily defended enemy territory requires extensive preflight planning, and units normally receive notification at least 48 hours out with a final briefing on threats and positions of friendly forces before takeoff.

Aircrews are capable of successfully operating at unmarked drop zones (DZs) but usually have something they can hang their headphones on. When ground and air component commanders agree to use a specific DZ, reception committee personnel coordinate with the aircrew on the type of markings to be used, configuration of the DZ, method of authentication, and release point determination. The most frequent cause for mission aborts is a lack of coordination or confusion over marking procedures: It is important to note that terrain following is made difficult during moderate showers and is even further degraded during heavy thunderstorms.

Depending on the mission, an aircrew makes either a static-line, low-altitude air drop; a high-altitude, low-opening (HALO) air drop; a surface-to-air recovery (STAR) using a Fulton extraction system; or simply lands the aircraft. For static-line drops during



**(A) MC-130E crewmen check the console of electronic countermeasures during an infiltration exercise. (B) MH-53J Pave Low helicopters swing into position to begin in-flight refueling operations.**

combat operations, a Talon is flown as low as 750 feet, while a HALO drop, which requires a free fall before parachute opening, is never conducted from lower than 1,500 feet. For static-line drops combining both men and equipment (such as rubber rafts), troops exit immediately after ejection of equipment. A STAR can be used for extractions during day or night but requires fairly good weather to accomplish the mission safely. Either two people or 500 pounds of equipment can be picked up over land or water per pass. During air landings, the minimum length necessary is the takeoff/landing roll plus 500 feet for a total of approximately 3,000 feet. The Talon's minimum required runway width is 60 feet and, while the capability exists to set down at a landing zone that has no lights or is lit with infrared lights, use of the special forces seven-light panel marking system (which includes a 250-foot/10 percent safety zone at each end out) is preferred.

The HC-130P Combat Shadow tankers have essentially the same extensive radar and navigational aids as the Combat Talon, as well as the ability to refuel two helicopters simultaneously in flight. After the tanker unreels its fuel line and slows to approximately 120 miles per hour, the Shadow's customer slowly edges its refuel probe closer to the drogue-tipped hose while making certain that it stays beneath or to the outside of the tanker's turbulent slipstream. It generally takes an MH-53 less than 10 minutes to top off and an MH-47, with its huge fuel blisters, can get its fill in about 15 minutes.

helicopters, and conventional mechanized infantry forces brought maximum pressure to bear on the PDF in the streets below. The overloaded chopper was hit by ground fire and landed with an unceremonial thud on the street below. The iron-nerved aviator maneuvered it down the street like a taxi and pulled into a parking lot. Using several tall apartment buildings as a shield, the pilot again tried to make his getaway, but the Little Bird was knocked down again, this time for good, and the men formed a defensive perimeter nearby. Seconds after one DELTA trooper held up an infrared strobe light, they were spotted by a Black Hawk, and three 6th Infantry Regiment M-113 armored personnel carriers came to the rescue. Four DELTA troopers were hurt, one seriously, but unlike the events some nine years earlier in Iran, this plan was executed successfully.

Chapter 5

# BACK TO THE DESERT

A thirsty trooper inhales bottled water in the shade of a C-141 StarLifter in Saudi Arabia.

The deep sleep of the early morning hours was interrupted by the familiar sound of a pager. Reaching for his clothing, the young sergeant kissed his wife and went to check on his son. The trooper bent down to kiss the boy goodbye as he had so often in the past. He then pulled on his well-worn cowboy boots, climbed into his pickup truck, and drove to the post. In less than two hours, the young sergeant's troop was winging away from Pope Air Force Base near Fort Bragg. As the wheels of the lumbering C-141 StarLifter retracted into their wells, his troop commander was already scanning the initial intelligence reports from the agencies supporting the unit. Things were not so good in the land of oil and sand.

On the morning of August 2, 1990, mechanized elements of Saddam Hussein's elite republican guards stabbed across the desert frontier separating Iraq and Kuwait east of the disputed Rumalia oil field. Iraqi forces had been massing steadily across the border for almost two weeks before the invasion, but both Western and Arabian governments believed this to be nothing more than a show of force to bolster Hussein's financial claims against the oil-rich kingdom. By midday, all meaningful resistance by Kuwait's tiny army had been crushed, and its royal family had fled to a sumptuous exile in Saudi Arabia.

The Baathist government in Baghdad rejoiced over its seemingly quick victory and believed that it had been accomplished with such speed that the world was presented with a *fait accompli*. Hussein expected a toothless condemnation from the United Nations and perhaps even a half-hearted economic embargo that would soon fade away. U.S. and British leaders meeting in the United States immediately resolved that the rest of the Middle East's oil resources must be kept out of Hussein's bloodied hands, at all costs. Even before Hussein's generals gathered their forces for the next morning's move to the Saudi border, numerous elements of America's Special Operations Forces were either deployed or going "wheels up" from bases in the United States and Europe.

From the moment President George H. W. Bush was notified that Iraqi forces were forging across Kuwait's border, one of the prime challenges he faced was the possibility—indeed probability—that many Americans would become prisoners in a dangerous diplomatic game. The specter of another major Middle East hostage crisis loomed over the Pentagon and the White House. And no one needed to be reminded that the Carter administration fell because of the prolonged hostage crisis in Iran. Plus, the U.S. Embassy staff and numerous Americans associated with Kuwait's petroleum industry were extremely vulnerable. When coupled with the Baathist regime's close ties with terrorist groups, history of wanton aggression against its neighbors, and deadly abuse of its own people, the president had no choice but to act. Although Special Operations Forces assets already in the Gulf were capable of performing a hasty-option response, the National Command Authority launched the first DELTA assets into the Middle East. Initially, DELTA assets were deployed as bodyguards, but senior commanders soon recognized that DELTA assets could be better used on other, more critical missions.

Crisis action teams were dispatched to Saudi Arabia and other friendly nations to establish $C^3$ (command, control, and communications) sites for future operations and to provide a terminal for information to and from Washington. Launch sites for missions were identified and staging areas hastily opened. Meanwhile, back at Fort Bragg, the Joint Special Operations Command (JSOC) began building a massive workup of target folders for the long war that was sure to come.

An Iraqi television picture of Saddam Hussein and a "guest."

All-terrain fast attack vehicles (FAVs) and motorcycles saw extensive use by Special Operations Forces, including DELTA, in Iraq and Kuwait and operated from forward bases in Saudi Arabia or base camps established far behind Iraqi lines. Motorcycles with heavily muffled engines offered troopers individualized, high-speed movement, coupled with the ability to approach a target from several axes simultaneously and, on some types of missions, were used in combination with FAVs. *Soldier of Fortune*

A C-130 of unidentified type sits baking under "big red" across from a special operations Black Hawk with external add-on fuel tanks. DELTA operated out of secure, remote bases dotting the desert wastes south of the Saudi-Iraqi border.

All-terrain fast attack vehicles (FAVs).

Elements of the Intelligence Support Activity (ISA) were also moving into the area. Like so many parts of the special operations force, ISA was an offshoot of the *Desert I* after-action review. The lack of information from human intelligence (HUMINT) sources was a critical failing during the hostage crisis in Iran. DELTA did not have an eyeball on its target in Iran. In Iraq and Kuwait, ISA would provide the needed eyes.

Various elements of the myriad special operations units in Europe and the United States continued to move in, and most of the burden of working with the resistance inside Kuwait was assumed by special forces units in accordance with theater war plans. As predicted, U.S. and other foreign nationals did indeed become "guests" at selected Iraqi strategic military and nuclear sites but were eventually allowed to leave as a "gesture of good will" when their continued captivity threatened to precipitate, not prevent, an assault on Iraq. DELTA remained.

Commencement of the coalition air campaign raised fears that hostages might be taken around the globe, and additional

target folders of possible hostage-holding centers were created. While significant terrorist operations never emerged, the public display of Allied prisoners of war did cause concern at the highest levels, and plans were formulated to rescue those individuals. Small teams were also selected to carry out a number of sensitive direct-action missions against targets in Iraq's command-and-control nets.

Special Operations Forces had to determine how to get the conventional force commanders to use their capabilities properly or even at all. For example, the 75th Ranger Regiment's assessment team left the Gulf after discovering that there was very little they could do in the theater, and the 82nd Airborne Division was severely handicapped on the billiard table–like terrain without an immense amount of support.

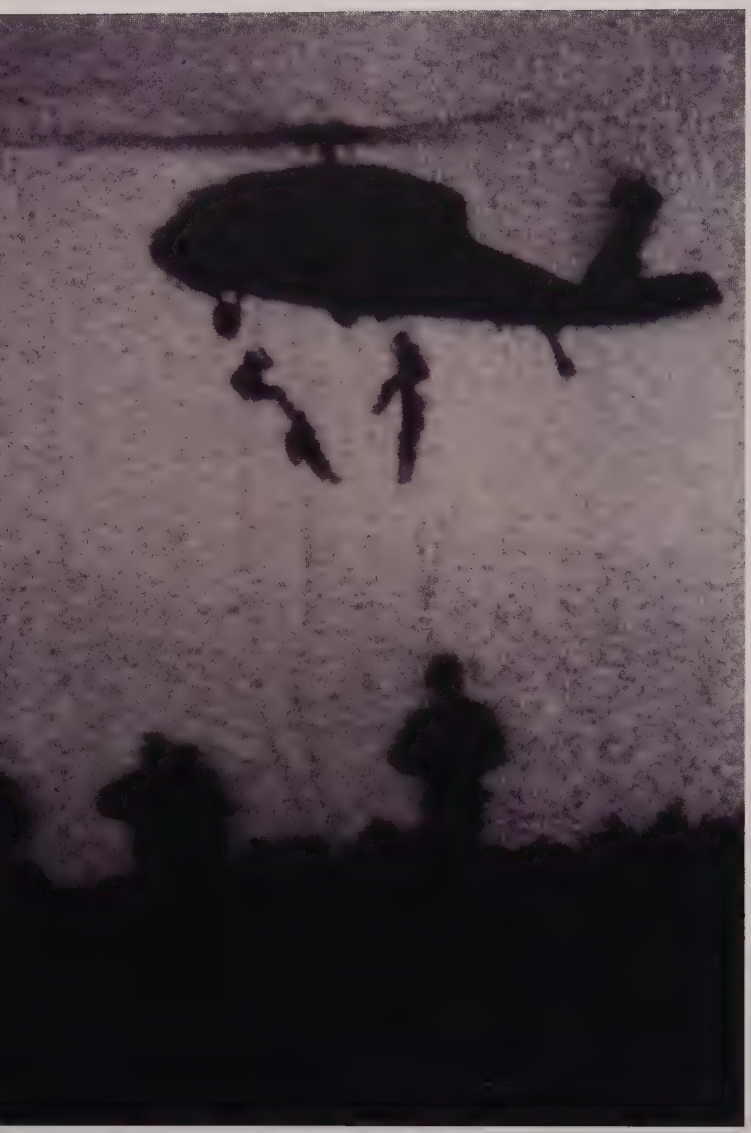
(A) A Scud B medium-range ballistic missile on its MAZ-543 transporter-erector-launcher (TEL) and (B) a rare photograph of a Scud impact. Even before changes were made to the weapon that degraded its accuracy, the Scud was not known for its ability to make pinpoint strikes. This weapon was fired by Soviet forces at Afghan guerrillas who had surrounded Loyalist troops at an isolated garrison. It missed the guerrillas and landed instead within the government troops' defensive perimeter. *Soldier of Fortune*

Scud-hunting DELTA troopers check their gear in a wadi during their long-range patrol deep in Iraq. The urgent mission forced General Schwarzkopf to draw on his only uncommitted special operators: DELTA and the SAS. Note the ad hoc camouflage of hurriedly spray-painted squiggles on the vehicles.

Colonel Jesse Johnson, commander of Central Command's (CENTCOM's) Special Operations Command (SOC), drafted his campaign plans for the upcoming desert war from his headquarters at King Fahd International Airport near Dhahran. A veteran of *Desert I*, where he commanded the joint Ranger- DELTA road-watch teams, Johnson knew what difficulties awaited his forces. Luckily, his boss at CENTCOM, General H. Norman Schwarzkopf, had the utmost confidence in his special ops commander. Despite attempts by elements within the joint chiefs of staff to replace him with a two-star officer, Schwarzkopf kept his faith in Johnson, who in return became the architect for several brilliantly executed operations.

## Hussein's Vengeance Weapon

As the war progressed, the Scud B medium-range ballistic missile, successor to Hitler's infamous V-1 and V-2 rockets of World War II, was unleashed. The Scud retained many of the V-2's basic characteristics, along with many deadly improvements. Highly mobile, it nevertheless required more than an hour to fuel and its involved targeting procedures took excruciatingly long to complete, even when performed by experienced crews at preplotted sites. Plus, homemade versions of the missile, like the *al Hussein*, incorporated range enhancements that both reduced its warhead capacity and severely degraded its ability to strike near its target.



Troopers viewed through an NVG rappel from a Black Hawk.

A night-stalking F-15 takes on fuel during *Desert Storm*.

The Soviets designed the Scud to deliver small nuclear warheads or to function as an area saturation system when fired in conventional battery salvos; the Iraqis instead used it as a fire-in-the-general-direction-of-your-adversary-and-then-wait-for-the-results weapon, intended principally to terrorize their neighbors. Fixed launch sites containing both real and dummy missiles existed at airfields in western Iraq, targeting Israel, and in eastern Iraq, aimed at Iran and Saudi Arabia. These sites were well known to U.S. and Israeli planners and could be easily destroyed. It was Hussein's surprisingly large number of wheeled Scud and Frog missile launchers that proved to be exceedingly difficult targets for air reconnaissance assets to locate. That set the stage for one role DELTA troopers never dreamed of or trained for: Scud hunting.

Many, if not all, of the troops deployed to the Gulf had extensive training in their initial special forces specialties and were already experts in carrying out such standard missions as unconventional warfare, special reconnaissance, foreign internal defense, and search-and-rescue operations, to name a few. But it was the introduction of Hussein's terror weapons that forced the counterterrorists to revert to these basic war-fighting specialties and become what the press dubbed "super commandos." The war was going poorly for Hussein, and he knew that his best bet was to drive a wedge between the Arab and Western elements in the coalition arrayed against him. If attacks on Jewish population centers could push Israel into a knee-jerk military response, Hussein believed that indignant Arab masses would finally heed his call for a jihad, or holy war, and either overthrow unfriendly governments like President Hosni Mubarak's in Egypt or, at the very least, force their governments to withdraw from the coalition. Western elements would be isolated and forced into an ignominious withdrawal.

Hussein's strategy wasn't difficult to anticipate, and the White House made strong public statements (coupled with a rapid, showy deployment of a Patriot surface-to-air missile battery to Tel Aviv) that drawing Israel into the war would be prevented at all costs. CENTCOM had no choice but to commit its Air Force component to a resource-consuming search for mobile launchers with little to show for its efforts.* This same mission was also handed to the Army's special forces, which, if necessary, would target individual vehicles for air strikes—an extremely risky business for the troops involved but a very important mission in light of the strategic situation. But CENTCOM quickly discovered that there was a critical

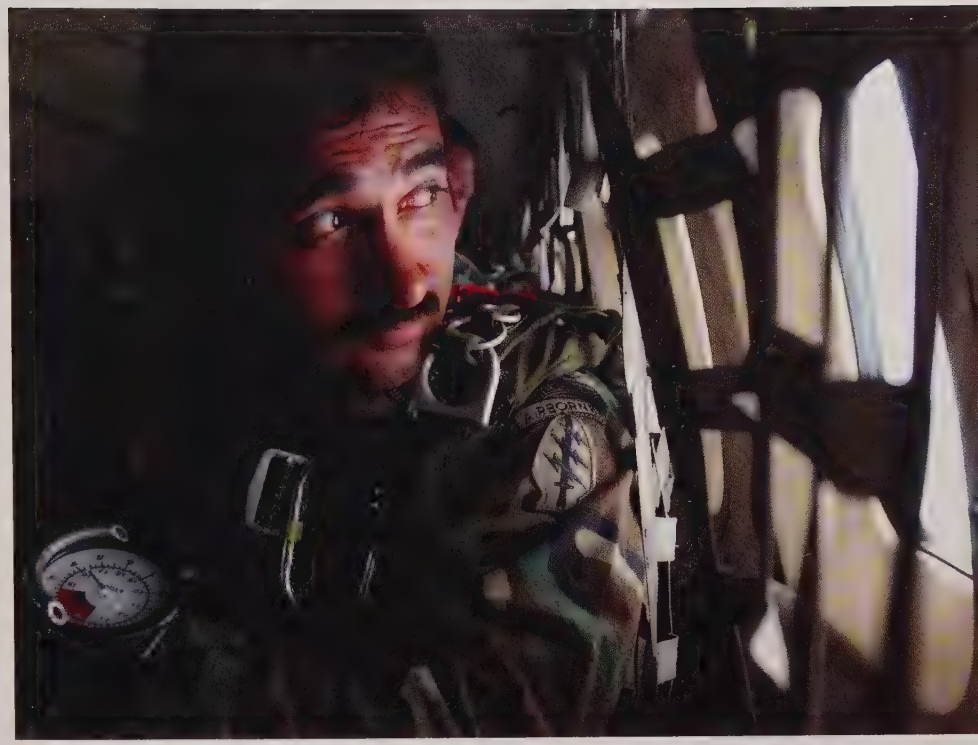
*The continued success of the Iraqis at hitting Israeli and Saudi population centers necessitated that a full squadron of F-15Es be pulled from the air campaign and assigned to eliminate mobile Scuds. Other air assets were soon added as the equivalent of three squadrons became involved in the effort and the number of sorties by Scud-hunting intelligence, refueling, and strike aircraft sometimes climbed to more than 300 per 24-hour period. Although a severe drain on U.S. resources, this heavy and prolonged commitment was instrumental in convincing the Israelis to call off two planned raids into western Iraq that could have had a disastrous effect on the war effort.

shortage of trained special recon teams in the Kuwaiti Theater of Operations (KTO).

Special operations assets, primarily DELTA and the desert-wise SAS, were formed into teams and prepared for the upcoming operations. At first, though, Colonel Johnson's professionals from Smoke Bomb Hill and the Ranch were understandably missing from the almost-continuous Gulf news coverage, while other forces from Fort Bragg, the XVIIIth Airborne Corps, the 1st Corps Support Command, and the 82nd Airborne Division, received their share of the limelight.

## Prepping the Battlefield

An in-depth mission analysis was conducted on the upcoming Scud hunt by the intelligence agencies supporting the theater's Special Operations Forces. Intel experts scrutinized the terrain and infiltration/exfiltration routes through Iraqi antiaircraft belts, and known locations of enemy units were plotted on situation maps. As this information was analyzed, a clear picture emerged indicating that most target areas could be easily reached by Army MH-60 Pave Hawks of the 160th SOAR or Air Force MH-53 Pave Low IIIs of the 1st Special Operations Wing.



A special operator has time to reflect as he is flown to a high-altitude, low-opening (HALO) insertion. Note the altimeter on the soldier's left wrist.

Two HALO experts prepare to land on the drop zone.

Unfortunately, the extremely heavy demand for specialized helicopters in the KTO, as well as other considerations, meant that they couldn't be used in every situation. For tactical reasons, the target area required a HAHO infiltration. HAHO (pronounced hey-ho), or high-altitude, high-opening, means that a drop is conducted at about 30,000 feet or higher, with the jumper opening his parachute just after clearing the plane. The trooper then glides his maneuverable double-canopy parachute through the sky and lands with pinpoint accuracy at a predetermined site. The distance between ripcord pull and landing point can be as much as 50 miles.

The team is required to prepare a briefback on how each trooper will carry out his duties; this is standard operating

An Air Force special operations combat control team member exits from the open ramp of a MC-130 Combat Talon. Control teams are often inserted before the arrival of special operations or conventional forces to mark landing or drop zones that must be used at night by pilots using NVGs and aircraft fitted with infrared imagers. For example, a control team member had already arrived at and marked the *Desert I* refuel site in Iran before the arrival of the aircraft bearing DELTA. The lack of weapon and rucksack indicates that this was taken during a practice exercise.

procedure within the special operations community and covers the friendly-versus-the-enemy situation, the mission, its execution, support requirements, command structures, and a concise, detailed narrative of how the trooper will help accomplish the mission. The briefback, then given to the unit's leaders, not only demonstrates that the men are ready, but also assures the team

A special forces trooper takes up the frog position during a practice jump.

that everyone is playing off the same sheet of music.

After a few questions, the team is given the go-ahead and conducts final rehearsals, equipment checks, and other preparations. On this mission, they're more concerned with the sneak-and-peek than with the direct-action aspects of the operation. If they can find the elusive transporter-erector-launchers (TELs), they'll call in an air strike and, if necessary, use a portable laser to target the weapon for destruction by the Air Force.

The basic plan is simple. The team will move undetected from their drop zone to a hidden observation point overlooking a likely area for Scud activity. When confirmed targets enter the area, SOC will be notified, and an E-2C Sentry's airborne warning and control system (AWACS) will vector strike aircraft into the target area. During their approach, the jets follow voice or signal beacon wavelengths to their prey. Air attacks will be conducted visually, but any TELs obscured by darkness, camouflage, or poor weather will be lased, or painted, by the recon team. Rolling in on their bomb runs, the fast-movers' sensors will lock on a laser-guided bomb or rocket and release the smart munitions to glide along the laser's invisible path like a road map to the target. The jets will then maneuver away from the area, having only teased the outer perimeters of the lethal antiaircraft systems' kill zones, and DELTA troopers will continue to lase targets as needed. As many Iraqi units discovered, the laser's invisible beam brought very visible destruction.

Reaching the departure airfield, the team is ushered into a secured hangar where the specialized gear for the mission is stored. The departure airfield will also be the mission support site (MSS), and a mobile communications van, mated to the main SOC communications bunker at King Khalid Military City,* has been moved into the hangar. The van constitutes part of a duplex communications network that ensures reception of the team's vital intelligence even if one part of the network goes down from either systems failure or enemy action. Meanwhile,

*Designed and constructed by the U.S. Army Corps of Engineers during the Iran–Iraq War, King Khalid Military City is one of three huge base complexes around which the outer defenses of the kingdom are formed. The Emerald City (as it was called by many U.S. soldiers, who were surprised at the sight of it rising out of the desert wastes) is located roughly 110 miles southwest of Kuwait's westernmost point, almost halfway to the major Saudi Arabian city of Buraydah.

**Above:** The control and reporting center outside King Khalid Military City which linked U.S. and Saudi mobile and airborne communications. **Left:** An internal view.

the troopers stay focused on checking and rechecking their weapons and field gear. All weapons are test-fired before leaving the isolation site, and at the hangar a ritual that weds the jumper to his air items and other essential equipment takes place. This union ends only when the mission is completed—or they are parted by death.

The six troopers wear sterile desert camouflage fatigues with the required face scarves and flop hats. Struggling mightily, they pull on cumbersome, insulated jumpsuits to help fight off the cold, which sometimes exceeds –50 degrees Fahrenheit at 35,000 feet, even in the Middle East. In addition to its insulation, the jumpsuits have radar-absorbing capabilities that will impede the enemy's ability to detect the soldiers as they glide across the sky. The February night engulfs the airfield and provides some relief as the men don their parachutes and oxygen masks. Before high-altitude drops like this, both the jumpers and the crew of the unpressurized aircraft have to start breathing oxygen one hour before takeoff. The team receives final jumpmaster inspections, and the troop commander arrives for one last visit. He is more of a fellow member than a commander, and everyone in the hangar knows how the boss feels. He'd trade in his major's oak leaves to be going with them into Iraq.

Following the safety NCO out into the desert darkness, each man finds his own release to the inevitable tension. Their transportation, a huge C-141B, rests majestically next to the hangar, its gaping clamshell doors exposing the broad tail. The team struggles up the StarLifter's ramp into the cavernous cargo bay, while the crew chief and loadmaster guide the men around the small patches of hydraulic fluid dotting its deck. An oxygen console rests securely in the center of the compartment, and each jumper plugs into it after disconnecting the oxygen mask from his individual bailout bottle.

As the StarLifter slowly pivots and then begins to taxi, the crew chief switches the internal lighting to the red lights required for the team to gain their night vision. The pilot reaches the main runway, and as he revs up the four powerful Pratt & Whitney turbofans for takeoff, each team member is caught in the thoughts of the moment: the myriad details that must be covered so the mission succeeds, his wife, family, or the girl back home—the same thoughts soldiers have had to deal with since the second-oldest profession began.

## The Jump

The C-141B flies on an easterly heading to its rendezvous point with two B-52s flying in from the tiny island base of Diego Garcia deep in the Indian Ocean. Snuggling into the number three slot, the formation portrays just another inbound bomber formation for any Iraqi radar still operating.

As the unlikely trio nears Iraqi airspace, the jumpmaster receives updates from the navigator. At prescribed checkpoints, he notifies the team of their exact coordinates so they all know their location in case they're forced to bail out early. Thirty minutes from jump time, the team prepares for the infil. The men make sure their rucksacks ride snugly against the bottom of the main parachute. Checking their padded-leather jump helmets, goggles, and oxygen masks one last time, they prepare to change over from the oxygen consoles to the bailout bottles strapped to their left sides. On command from the jumpmaster, the jumpers switch to their bailout bottles and waddle toward the open troop doors on each side of the fuselage.

Staff Sergeant Len Rodgers and the rest of the recon team work their way to positions along the walls of the StarLifter as their communications man, serving as jumpmaster, completes his visual checks and gives the hand signal for standby. The cabin's eerie red lights, green jump light, and the howling winds whipping in the open troop doors could easily meet the needs of a good nightmare, and Staff Sergeant Rodgers is nearly deafened by the roaring wind and mournful banshee whine of the engines. He marvels that some people actually think this is fun. Moving closer to the door, he receives the "Go!" signal, as the jumpmaster disappears out the open troop door.

Pivoting on the ball of his right foot, Rodgers swings out behind him and falls into the "frog" position. The rest of the team immediately follows in quick succession. Plummeting through the moonless night, arms and legs extended, Rodgers feels the penetrating cold. Behind him, each man monitors the altimeter securely strapped to his left wrist and assumes the glide position as he prepares to deploy his parachute. At 30,000 feet, they pull their silver ripcords.

To the casual observer, this particular maneuver looks like a giant hand shaking each jumper loose from his very life. In reality, the men feel very little, and each checks the double-layer canopy above to see if his is fully inflated. Fortunately for this team, all now resemble airfoil-shaped wings, and the jumpers line up in a rough, follow-the-leader formation, taking the planned westerly heading as Staff Sergeant Rodgers navigates through the frozen night air. Settling into the parachute harness, he scans the panorama unfolding before him. Far to the north, flashes appear from the bombing mission that the team's C-141 had joined. Craning his neck around to the southeast, he can barely make out green* tracers darting skyward in a futile search for the destroyers of a known Scud site's command-and-control bunker and wonders if it was done in by one of the F-117 stealth attack aircraft. He turns back and looks toward the unseen drop zone and toys with the idea that the display is for their benefit. He knows, however, that the distant explosions mean that real, flesh-and-blood men are dying.

As the team continues its noiseless flight, each jumper lines up on the dull luminescent strip on the helmet below. Altimeter checks show that the gradual warming they feel is due to the descent. At 12,000 feet, they remove their masks and inhale the night air. With each passing minute, the team gets closer to the drop zone, and this is when they're most vulnerable. They're sure that the entire Iraqi army is waiting to pounce on them, but the only living things awaiting them are some stray goats from a Bedouin camp that run bleating into the night when they strike the earth. The men are relieved that no reception committee is on hand to greet them, but there will be plenty of time for surprises. One of the greatest shocks of this desert war was the fact that whenever you thought you were in the middle of nowhere, someone always showed up—usually at the most inopportune time.

*Munitions manufactured by former Warsaw Pact countries such as the Soviet Union and Czechoslovakia give off green tracers, but the spectrum of hues sometimes runs to a yellow–green. U.S. and many Western munitions give off a red trace.

Chapter 6

# THE SCUD BUSTERS

*The Lord said to Moses, "Send men to spy out the land of Canaan. . .*
*from each tribe of their fathers shall you send a man, everyone a leader among them."*
*—Numbers 13*

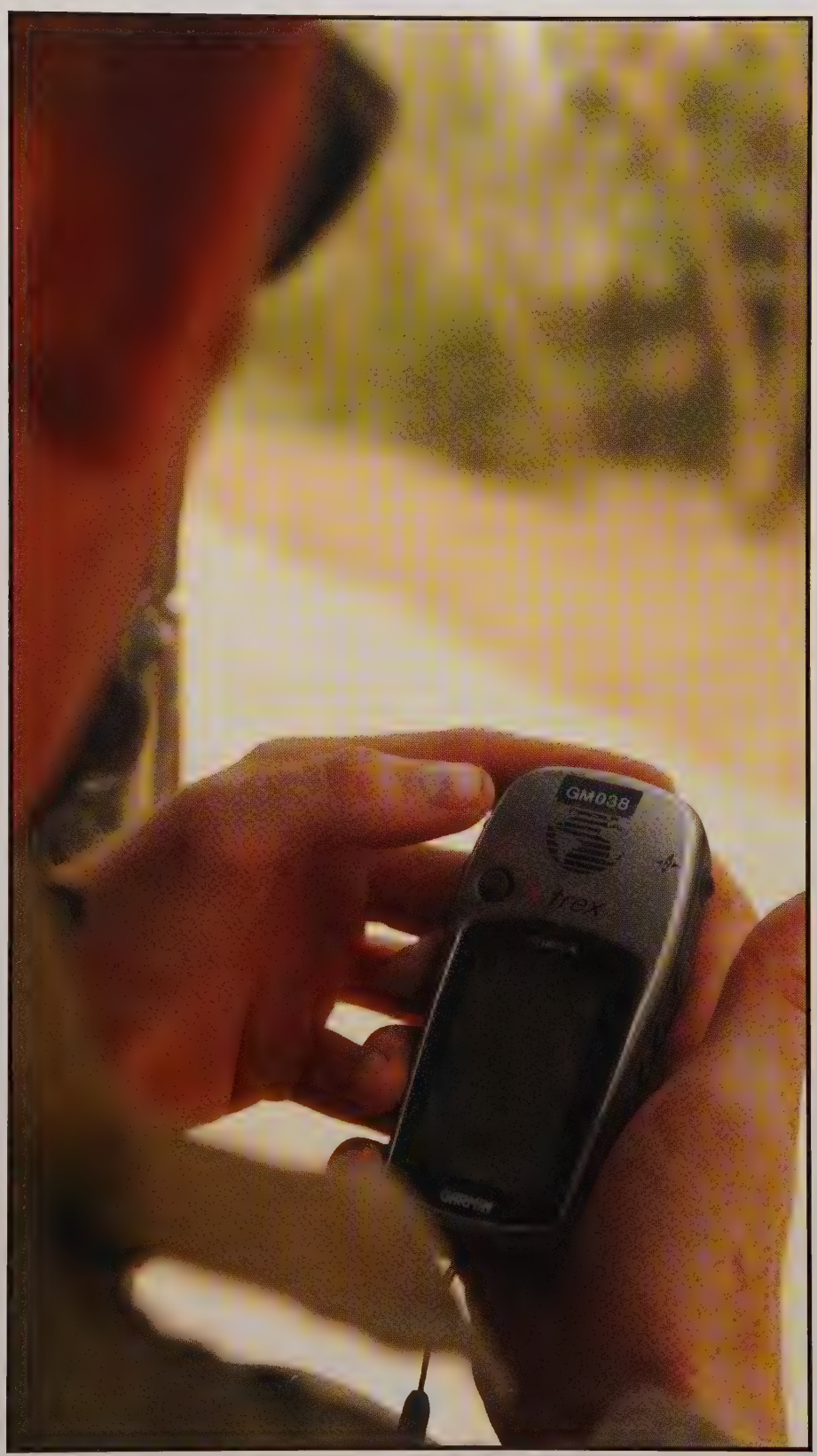
Troopers in the desert viewed through an image-intensification device.

The team quickly assembles after landing and moves to a nearby depression; half take up defensive positions, the others strip off their heavy jumpsuits and then roll them up with their 'chutes and jump helmets to make compact bundles. The gear is quickly buried, and the troops silently take their turn guarding the perimeter. Preparing to move out, each man goes through his mental checklist to ensure that every piece of equipment is in place. Faint vehicle noise drifts through the black night, and the telltale signs of light are visible to the south.

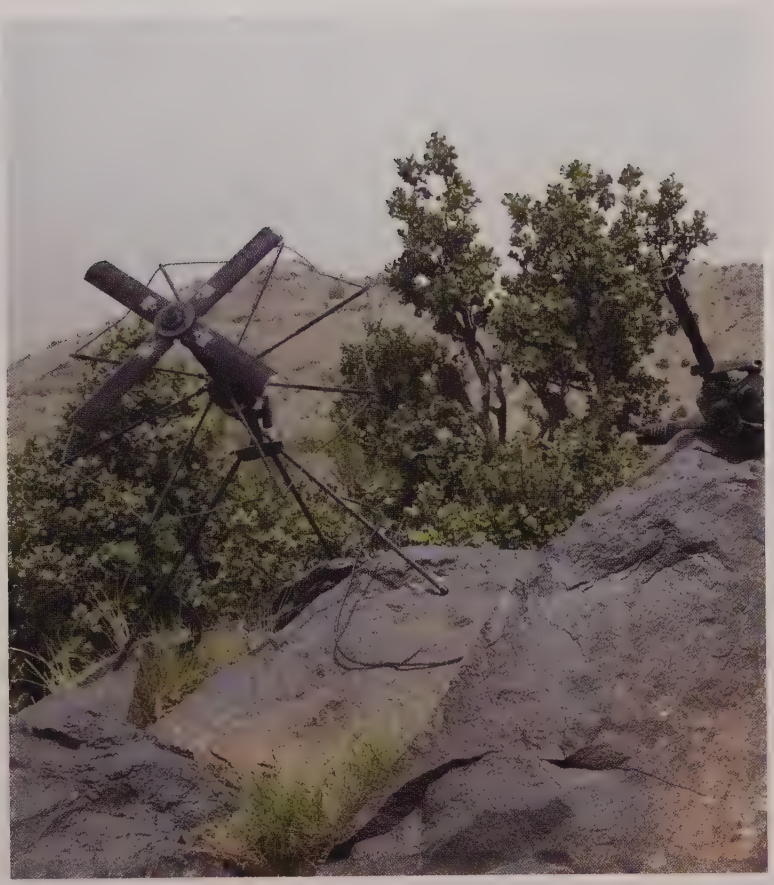
Staff Sergeant Christopher Gleason, the point man for this operation, silently moves to his right, where the team leader is making last-minute compass checks and using his handheld satellite navigation system to pinpoint the team's exact location. Chief Warrant Officer Gary Van Hee intently studies the tiny screen of his global positioning system (GPS) unit as Gleason points out the rather obvious activity to the southwest.

Each man's personal equipment is designed for specific tasks. Black balaclavas have been replaced with desert flop hats and face paint of pale yellow and brown. No-sweat bandanas and camouflage scarves are wrapped tightly around necks and tucked into chocolate chip-patterned camouflage jackets. The men carry ammunition in pouches hung from their vests, and distributed about their bodies are canteens, first-aid equipment, a powerful miniature flashlight, and a Beretta pistol. Two men also carry silencers to noiselessly kill enemy guards or inquisitive point men.

The threat of Iraqi poison gas is real, so each trooper carries a gas mask and a protective suit. Rucks are configured with




A special operator programs his global positioning system (GPS) during a lull in the fighting for Baghdad.



The business end of a satellite communications system (SATCOM) during operations near Narizah, Afghanistan.

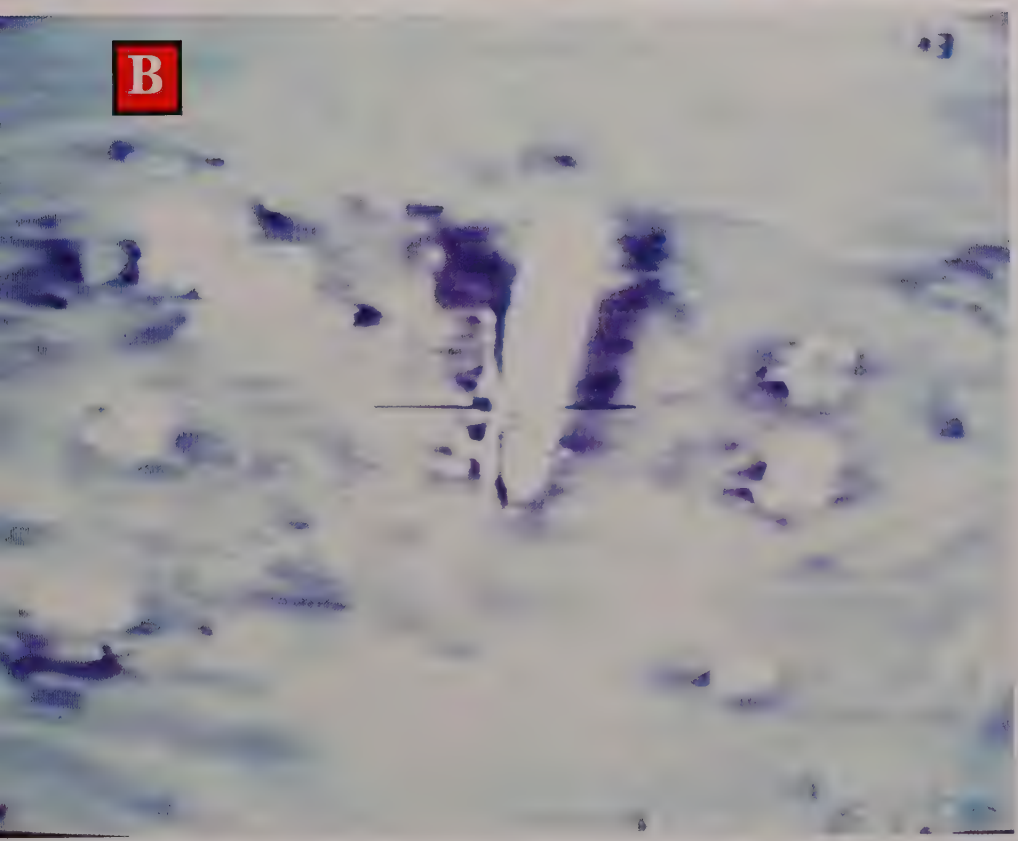
extra ammunition and smoke grenades. Additional water, medical supplies, food, and limited decontamination gear, complete the major equipment. For weapons, this team carries either Colt M16A2 assault rifles or Heckler & Koch MP5 submachine guns.

Communications expert Sergeant First Class Michael Cranson sends the team's initial entry report, a code-word transmission advising the MSS that they've arrived safely at the drop zone. Cranson uses his radio's burst-transmission capability; the split-second broadcast prevents hostile direction-finders from getting a fix on their position.

Armed with a silenced MP5 SD3, Staff Sergeant Gleason slowly leads the way toward a large, rocky outcropping, as the men fall in behind him in loose file. Gleason and his fellow troopers use AN/PVS-7 night-vision goggles to traverse the rocky terrain. Popularly known as NODs, for night-observation devices, the 1.5-pound goggles fit against a trooper's forehead and illuminate the darkness with an eerie

U.S. Special Operations Forces do not truly "own the night" as the often-repeated slogan claims, but they do operate effectively in that environment, due to a combination of superb training and equipment. Troopers viewed through an NVG move out under cover of darkness.

(A) A FROG missile and its mobile launching platform caught out in the open and destroyed. (B) A missile re-arm vehicle burned to the ground by Air Force jets.




(A) A disabled fuel truck in Iraq, and (B) a Scud TEL targeted by an F-15E. Target identification was often difficult at night, even with the most sophisticated ground and airborne systems.

green hue. By amplifying existing light, human-sized targets can be recognized from almost 100 yards on all but the very darkest nights, with good moonlight extending their range by 50 percent or more. Operating under a last quarter moon, the men can see extremely well, but spotty cloud cover creates sudden, unexpected drops in visibility, in addition to the device's limited peripheral field of vision.

The point man's stubby MP5, night-vision goggles, and modified tactical vest give him an unearthly

appearance. Walking behind the point man, the compass man, Staff Sergeant Rodgers, not only navigates with his compass and altimeter, but also by watching his distance count (how far he walks). The team leader occupies the number three position, and his communications man, Sergeant First Class Cranson, holds down number four. Positions five and six are rounded out by the team medic, Master Sergeant Frank Rodrigues, and the demolitions expert, another staff sergeant, who doubles as the patrol's tail gunner. His primary responsibility is to ensure that no one surprises the team from the rear.

A Scud missile erect on its launcher and ready to fire.

While approaching the low ridge where they'll set up their observation post, it becomes painfully clear that they have, indeed, dropped into an area full of Iraqi units. Reaching their destination, the team immediately sets up security, sends out a two-man recon of the area, and digs in.

The troopers are prepared to lie low for days, watching for the elusive Scuds, but dawn quickly reveals that part of Hussein's missile inventory is already operating in this area.

At first, only typical military and civilian traffic can be seen on the east–west highway stretched out before them. It isn't long, though, before Van Hee spots some familiar friends. Tailing along behind a westbound string of civilian Mercedes tractor-trailers is a Ural-375 truck mounting a mobile crane and a pair of Type ZIL-157V tractors hauling elongated cargoes covered by tarps. The vehicles continue for almost two miles and then pull off to the right about a hundred yards into the desert. Excitement runs high and reaches a peak a half hour later when an eight-wheeled MAZ-543 transporter-erector-launcher (a TEL vehicle known to carry Scud missiles) and a ZIL-157V tanker towing a trailer appear to the east. They zoom by and continue on to the other waiting vehicles which, by now, include numerous supply trucks, $C^3$ vans, and a mix of towed quad 23mm and dual 30mm antiaircraft guns in the process of deploying on both sides of the highway. The top of the TEL is still well covered by sand-colored tarps, but Van Hee is quite certain that it mounts a Scud.

The suspicious TEL remains with the other vehicles for only about 10 minutes before all but the antiaircraft element suddenly begin to move off in column across the desert. After only a few hundred yards, the lead truck turns abruptly to the left into a deep wadi that arches back toward the road passing under it at a long, thin bridge a quarter mile past their original turnoff. As far as the team leader's concerned, this confirms it. There is no reason for an Iraqi unit this far afield to go to this kind of trouble to hide itself unless it's a missile unit. At night, the TEL and select support vehicles will emerge back onto the flat terrain to fire its weapon of terror at Israel.

Sighting through his binoculars, Van Hee begins to list what he sees as the vehicles disappear down the path bulldozed to the dry streambed. As he reels off the NATO names, the team's radio operator writes them on his notepad. After one more sweep of the target area, Van Hee tells Cranson to inform headquarters that the mother of all targets is in front of them. He then slides back into the two-man foxhole, closes his eyes, and tries to relax.

Opening his rucksack flap, Cranson closely examines the satellite communications system (SATCOM). From the outside pocket he pulls a miniature satellite antenna folded so it looks like a small, closed umbrella. Unfolding its legs and arms, Cranson places the device just beyond the lip of the hide hole and checks its frame to ensure that each prong is extended to its maximum position. With a diameter of only 17 inches, the antenna's low profile makes it hard to spot or identify. Cranson plugs the antenna's coaxial cable into the SATCOM and turns it on.

Intense concentration marks the face of a trooper keeping watch on the surrounding terrain from a desert ruin.

While the system hums and ticks through its self-checks and calibrations, the commo man listens through his headset and consults the *Equatorial Satellite Antenna Pointing Guide* for the elevation and azimuth angles required to orient the antenna. Cranson moves the dish back and forth until he hears the unmistakable peep of the orbiting satellite and then settles in to start his transmission. He speaks in slow, distinct tones, sending the entire intelligence picture of what the recon team is viewing to a receiving station in the SOC communications bunker at King Khalid. Immediately, this vital information is passed through the U.S. Air Force liaison officer to CENTCOM's air component tucked away in a basement corner of the Royal Saudi Air Force building in Riyadh.

Within minutes, coalition jets pulled from the Scud-hunting air campaign are vectored from their stations as others scramble from Saudi fields far to the southeast. Twenty-two minutes after the initial report, the first aircraft arrive. The jets briefly circle well out of range of the frustrated Iraqi antiaircraft gunners as they coordinate their attack, and then make straight for the well-camouflaged vehicles parked along the dry streambed.

Tipped off to the Iraqis' exact location, the A-10 Thunderbolt IIs (affectionately called Warthogs, or simply Hogs) turn the wadi into a deathtrap. The jets continuously roll in and pound the missile unit, and then begin to work on targets up and down the highway. Their method of attack seems strange to the hidden team members watching the show with intense interest. All had seen live-fire exercises where the Hog drivers swooped in and plastered targets from treetop heights, but now the Hogs rarely ventured below 8,000 or 10,000 feet to avoid the antiair assets.

Throughout the day, air strikes continue to hit the target-rich environment. Periodic, huge explosions rend the wadi, and Cranson, who is monitoring the Warthogs' communications net, informs Van Hee that the Hog drivers claim "two Scuds TANGO UNIFORM" (tits up—slang for destroyed). Later strikes are conducted almost exclusively by F-16s with some help from Tornado attack aircraft of unknown origin. The team hadn't been briefed that Tornadoes would be in on the show, and although Cranson picks up their cryptic transmissions, he only knows that they are not speaking *American* English.

These aircraft, and all others working the many targets, fly no lower than the Warthogs and, consequently, there are a lot of misses. But Van Hee can clearly see that the cumulative weight of the air attacks has destroyed nearly every vehicle in the area with a combination of rockets, iron bombs, and cluster munitions. The medium-altitude attacks have, moreover, rendered the anti-aircraft guns nearly useless by striking from beyond their effective range. No one in the team sees any coalition aircraft go down.

As evening draws near, the team leader fears that their position is becoming increasingly vulnerable. Although well-hidden on a barely perceptible ridge, they are, nevertheless, located on the highest terrain feature in the area. It might only be a matter of time before the increasingly active Iraqi patrols unearth them. As soon as night falls, the team picks up its gear, sanitizes the area, and heads south across the nearly silent road. Moving carefully, the team settles into a steady, cautious march. Upon reaching a small depression, they form a perimeter and rest before continuing on to the exfiltration point.

But this is as far as they get. Gleason detects the hot thermal images of several trucks pulling off the highway barely 1,500 yards behind them. Both Gleason and Van Hee carry handheld AN/PAS-7 thermal viewers that detect the heat of the vehicles several hundred yards beyond the system's stated range. Almost immediately, the vehicles are joined by a larger semi trailer-sized vehicle. Could it be another Scud TEL? Through their two thermal viewers, the team watches with nervous excitement and glee as what appears to be more Scud launchers and support vehicles roll in. The men believe that their new neighbor is a full-blown battery preparing to launch a nasty surprise at Israel.

Under normal circumstances, the lack of clear, sharp images wouldn't prevent the team from determining if this were a Scud battery. Unfortunately, the recon team not only lacks altitude but is slightly lower than the Iraqis. From their eye-level view, all they can tell is that several dozen vehicles—some quite large—are arrayed to the north.

Whoever they are, the darkness has given them a false sense of security, and Van Hee can make out that they are neither properly dispersed nor making any effort at concealment. The team can easily call in an air strike, but even though the Iraqis are currently not well-dispersed, that could change in an instant. Moreover, if this were a Scud battery, even the fast-movers would have great difficulty identifying the critical launch vehicles, which are almost indistinguishable from fuel trucks and other lengthy vehicles at attack distances. Blanketing the area with cluster bombs wouldn't guarantee the mobile launchers' destruction either, although it would certainly "attrit" their crews and support personnel.

Van Hee simply cannot confirm that the vehicles are what he believes them to be. He instructs Rodrigues and the tail gunner to move toward the highway to get a closer look and gives them his thermal viewer. Gleason watches as their ghostly figures silently disappear. Everyone understands that the men may have to move in as close as 200 or 250 yards before their viewer will let them confirm the team's suspicions. If the approach to the Iraqi unit is difficult, the men might be gone for many hours. During their absence, the team checks and rechecks its equipment and notifies SOC of the situation.

The wait is mercifully short. Helpful terrain features and a surprising lack of security allow the scouts to complete their task in barely three hours. Rodrigues reports that at least two of the mystery vehicles are Scud TELs, and Van Hee wastes no time returning with him to a spot where Rodrigues is confident that the confirmed launchers can be painted for incoming aircraft. When Gleason first spotted the gathering Iraqi vehicles at roughly 1,500 yards, they were beyond the effective range of Van Hee's AN/PAQ-3 MULE target designator, and the laser team would have to travel almost one-third of the way back toward the road to get a clear fix on the TELs. Newer experimental handheld designators that can accurately illuminate targets at roughly three times the distance had recently been sent to the Gulf, but Van Hee's team was not among the lucky few to receive one.

The route back is well known, and the men move with deliberate haste. The midnight hour when Iraq often launches its weapons of terror is fast approaching, and both the laser team and Gleason identify the unmistakable raised pillar of a missile through their thermal viewers.

Rodgers peers intently at the shadowy image of assembled Iraqi vehicles and nervously fingers his M16. From his vantage point, he can see only one other trooper, the tail gunner, about

20 yards to his right, who gives Rodgers a thumbs up. Rodgers knows that he isn't the only man wondering if the fast-movers will make it before the Iraqis launch. He doesn't feel particularly expendable and hopes that the Air Force will refrain from using cluster munitions against close-in ground-lased targets as the team had been briefed before the mission.

Activity suddenly picks up near the road. Several of the smaller Iraqi vehicles scatter in all directions, and a lone dual-30mm antiaircraft gun, positioned slightly east of the launch site, begins to pop green tracers into the air. The team watches, mesmerized from their ringside seats as other antiaircraft artillery, or triple-A, quickly comes to life, sending aloft criss-crossing streams of fire. Cranson, meanwhile, listens in on the approaching jets transmission: "Honey 1, sixty seconds, Maverick . . . Honey 1, ten seconds . . . Honey 1, laser on . . . Spot . . . Honey 1, lock-launch. . . Sixty seconds to laser designator

**(Pages 102-104)** A surface-to-air recovery (STAR) of two troopers using a Fulton extraction system. An Air Force fast mover drops a canister containing the system—helium bottles, balloon, line, and attached suit. The guard cables and whisker-like probes of an MC-130 yoke open to snare the Fulton's line. Two volunteers with "Are we really going to do this?" looks on their faces are snagged up. The soldiers are hauled aboard through the open rear ramp of the receiving aircraft.

AN/AVS-6 Aviator's night-vision imaging system

AN/PAQ-3 Modular universal laser equipment (MULE) target designator

Comparative imagery from night vision equipment used by U.S. forces in *Desert Storm*: (top) unaided, daylight photograph of an M606 Jeep and the same vehicle shot from a slightly different angle through (center) image intensification and (bottom) infrared devices.

AN/PVS-7A Night vision goggles

AN/PAS-7 Thermal viewer

switch-on . . . Ten seconds to switch-on . . . Laser spot acquired . . . Target locked-on and ordnance fired."

The men have almost grown accustomed to the awe-inspiring spectacle when a huge double explosion bursts skyward. A Maverick air-to-ground missile has slammed into a TEL and ignited its fueled-up weapon.

Most of the triple-A falls silent for what seems like a long time, but one Iraqi gunner recovers from the shock of the explosion almost immediately and resumes shooting even before the fireball disappears into the air. Long strings of triple-A again arch into the sky as Rodgers and the others watch in fascination, knowing that Van Hee is already painting another Scud: "Honey 2, spot . . . Lock-launch . . . Honey 2, terminate. . . Laser spot acquired. . . Target locked on and ordnance fired. . . Have visual contact; laser no longer needed." A second huge explosion lights the scene, and more vehicles scurry away from the carnage. As far as the Iraqi grunts are concerned, all Hussein's little toys do is attract death from above.

Secondary explosions rock the target area as the laser team moves at a steady trot toward the patrol base. The Air Force is holding back from dropping its deadly cluster bombs to give them a jump at getting away from the target. Rodrigues and Van Hee's glowing green images can be clearly seen during their last 100-meter dash to the base, and some of the troopers can't refrain from greeting them with low-volume (*very* low-volume) whoops and hollers as they clear the perimeter. As if to join in the congratulations, the Air Force begins to hit the site again, and now the whole team moves out at a run. The troopers haven't covered a quarter mile when they suddenly smack into an Iraqi squad barely 30 yards away. The Iraqis were apparently on patrol when the air strike erupted and are riding out the attack in this shallow depression.

The startled team comes under fire. Dropping to one knee, Gleason pumps two 9mm rounds into the nearest Iraqi's chest. Without pausing, he switches to the next target, who immediately crumples into a heap, his stomach perforated by two slugs from Gleason's H&K. Immediately sizing up the situation, Van Hee yells for the team to break contact. While moving through their leapfrog maneuver, a lucky round from an RPG-7 shoulder-fired rocket launcher lands between Rodgers and the

Armed and ready, a special operations soldier watches for trouble through his night-vision googles.

tail gunner. Although most of the explosion is absorbed by the ground, shrapnel rips into Rodgers' right side, and the tail gunner is killed instantly by a dime-sized piece of metal piercing his skull just above the right eye.

The four uninjured troopers immediately lay down an intense base of fire, which convinces the Iraqis to fall back to less dangerous surroundings. The firefight has lasted less than two minutes. One American is dead and another's life is leaking into the rocky earth. Hauling Rodgers and the fallen trooper along with them, the team hurriedly resumes their escape south while Air Force jets strike at Iraqi vehicles streaking pell-mell through the area. The team is in deep, deep trouble, and, if action is not taken quickly, they will either be killed or wind up on the evening news as prisoners of war.

Air–ground communication between the team and SOC is now being maintained by a fast FAC, or forward air controller, who passes word to Cranson that immediate efforts are being initiated to get them out. They are instructed to keep moving south without delay, but they are faced with having to make a decision no soldier wants to make.

The young trooper's body hinders their movement to the extraction point, and they decide to bury him as quickly as possible. In a lonely defile, the team digs a grave for their comrade. It is not very much, as graves go, but they make it with love and respect, and the men dig as deeply as time will permit. Wrapping the staff sergeant in his poncho liner, they gently lay his body into the desert soil. Van Hee carefully checks, then rechecks, the tight ten-digit grid coordinate he has plotted for the unmarked grave and silently swears to his fallen trooper that he'll be back for him. The team says a quick prayer over their friend, and then, carrying Rodgers, they strike out south again. Rodrigues, the team's medic, recognizes that the multiple shrapnel wounds are worse than previously thought. Rodgers is slipping in and out of consciousness and losing blood. Cranson radios the fast FAC that they have a man who will die if they don't get him out soon.

SOC knows that no special operations helicopters are currently available for a quick recovery, nor are there likely to be any until almost mid-morning.

Virtually everything is already committed to the far-flung operations in progress throughout what the Israelis call "Scudinavia" in western Iraq. SOC decides to use an MC-130 Combat Talon equipped with a Fulton Recovery System to conduct a surface-to-air recovery (STAR) of Rodgers. This is not generally a preferred method of extraction because it takes so much time to set up the Fulton and is easily seen, but with helicopter assets unavailable, Rodgers' condition requires it. Alerting the 1st Special Operations Wing, a hasty plan is worked out to recover the wounded DELTA trooper.

## The Extractions

Arar Royal Military Airfield near Banadah is the launch site of some of Operation *Desert Storm*'s most inventive missions. It's not an unusual place to find one or two of the 1st Special Operations Wing's MC-130s, and when the call comes down, immediate preparations are made for the STAR. First, a modified delivery canister is loaded with all the items needed by the team to set up the recovery. The canister is then affixed to the waiting A-10's weapons pylon, and the Warthog is immediately launched toward western Iraq. As the "Sandy"* Hog driver and

his wingman speed north, the crew of the MC-130 receives their mission brief. Not uncharacteristically, the crew takes the briefing quite professionally; yet, underneath their calm exterior, adrenaline surges. They are about to execute a mission that they have trained hard for, a mission that has not been performed in combat for nearly 20 years.

Already deep in the desert, the recon team is now told to move beyond their original pickup point into an even more desolate area well away from any known military targets. After several hours, the exhausted team comes upon a group of ruined dwellings and sets up defensive positions as dawn begins to break. Rodrigues has just changed Rodgers' i.v. and is connecting a new bag of saline solution when Cranson's radio crackles to life. The Sandy pilot is attempting to contact the team. Hopefully, it will appear to any nearby Iraqis that the Hog driver and his wingman are out hunting for targets of opportunity and will avoid any curious overtures.

Van Hee is informed that he should mark their position for a "delivery." Using a mirror, Van Hee signals his location to the Sandys performing their lazy search pattern well away from the team. After receiving an acknowledgment from the pilot, Van Hee moves out about 175 yards from the perimeter, places a single orange panel in the gravel, and immediately moves back to the shelter of the ruins. The pair of Warthogs are continuing their indirect meander toward the ruins when they spot a group of Iraqi trucks moving parallel to the team approximately two miles out. Although they do not appear to be looking for the troopers, the Sandys take no chances and proceed to spoil the Iraqis' morning with fire from their 30mm Gatling nose cannons. As the Hogs leave the burning vehicles, they approach the ruins indirectly by flying in a low, wide arc that, hopefully, won't draw attention to the hidden Americans. No extra passes are made over the site, and the equipment canister is pickled off as the ugly jets roar overhead.

Thirty minutes behind the Sandys, the MC-130 Combat Talon penetrates into enemy territory. While passing over the berm line, the special operations aircraft receives an ominous radio report from the E-3A Sentry orbiting in Saudi airspace behind them. Electronic warfare officers operating the AWACS' sophisticated sensors detect a number of hostile radar impulses. Despite the fact that the Air Force owns the sky, being painted over Iraqi territory always causes concern. Most of the Talon's crew had friends on the ill-fated AC-130 Specter gunship that failed to get out of Kuwaiti airspace when locked on by a surface-to-air missile. The result was charred debris floating in the Gulf and no survivors.

As the Talon closes on the team's location, Van Hee and Gleason open the canister. Extracting its contents, they find a balloon, nylon line, harness, and suit along with a bottle of helium. Rodrigues checks Rodgers' condition while Van Hee and Gleason prepare to inflate the balloon, and Cranson makes contact with the inbound Talon. Not only is the MC-130 approaching, but the pair of A-10s continue to ply the area in ostensibly random patterns, and a flight of F-16s has already assumed a guardian-angel role well to the east but within easy striking distance if trouble develops. The Warthogs again cruise past the ruins while Van Hee and Gleason affix the helium bottle to the balloon that will stretch Rodgers' lifeline in reach of the specially equipped rescue aircraft. As it inflates, the bulbous cream and silver balloon takes on the shape of a giant fish, its floppy fins growing firmer with each passing second.

Rodrigues and Cranson gingerly ease Rodgers into the olive-green recovery suit sewn firmly to the Fulton's harness. As its fur-lined hood is placed around Rodgers' face, his glazed eyes open slightly to Rodrigues' familiar grin. His medic friend has been in DELTA for a long time and has a well-earned reputation as a battlefield doctor. Patting Rodgers' thigh, he says with a chuckle, "You gonna go on a neat ride, my man. It's up, up, and away for you." Rodrigues does his best to put up a brave front for his buddy but fears that Rodgers may have lost too much blood. His face is gray and expressionless, but it seems for a moment that he tries to acknowledge what the medic is saying.

Twenty minutes from the pickup, the balloon creeps slowly skyward. It reaches its full height, and Rodgers sits securely attached to its tether while the team, minus the doc, stands guard in a circle resembling a herd of buffaloes shielding a wounded calf. Rodrigues continues his lively chatter to help keep his patient awake and gently pats and strokes his uninjured left arm. Although Rodgers doesn't know it, the determined woofing is paying off, and he dimly comprehends that his buddies are doing everything they can for him.

At 525 feet, the balloon acts as a beacon for all to see and is the reason that the team had to put so much distance between themselves and the highway. The incoming MC-130's unusual nose now resembles a snout with two large whiskers, which are actually probes swung outward to form the yoke. Their main function is to guide the line into place at the center of the nose as the plane makes the pickup.

Cautiously lining up on the balloon, the pilot throttles the airplane down to 112, 105, then only 97 knots for the pickup

*An A-10 pilot specially trained for rescue escort (RESCORT) missions. The rugged A-10's ability to loiter for extended periods of time makes it perfect for conducting searches in a high-threat environment, and Sandys are experts at locating survivors. By marking target locations and suppressing enemy fire, they allow more vulnerable rescue aircraft to do their job. The term originated during the Vietnam War as a call sign used by A-1E Skyraider pilots providing gunfire suppression during rescue operations.

The venerable A-10 Thunderbolt II "Warthog" and DELTA formed a deadly Scud hunter-killer team in Iraq. The A-10s also proved themselves to be effective search-and-rescue assets in Iraq.

and aims at the target area marked on the nylon rope by three orange streamers. Striking the target markers, the probes guide the line to the yoke and secure it as the plane flies over the DELTA team. With a minimum of fanfare, Rodgers is snatched from the ground and becomes a small dot hurtling behind the Talon. While the STAR is a nerve-racking affair for the soldiers to watch, they know that Rodgers actually experiences less of a jolt during the pickup than he did when he opened his parachute.

In the gaping cargo bay, the loadmaster and crew chief now prepare to winch their human cargo on board. The nylon line is pressed firmly against the Talon's belly by the rush of air, and inside the bay, the crew chief and loadmaster move quickly to hook it, much as one snaps a fishing line. Reeling in the line and attaching it to the Talon's internal hydraulic winch, the precious cargo is slowly drawn into the cargo bay. Soon, Rodgers is in the safety of the aircraft while Air Force Reserve trauma specialists work frantically to stabilize him.

As the MC-130 speeds toward friendly airspace, the remainder of the recon team moves out. A well-timed air operation, centered mainly along the highway to the north, is initiated by the F-16s and a fresh pair of A-10s to mask their movement, and the troopers head south by southwest toward a new pickup point several miles away. Although appropriate helicopter assets will be available in a few hours, SOC has decided to wait until dark to make the extraction, since Rodgers has been rescued and the recon team is in no immediate danger.

The team members had flung their hide-site covers into their foxholes and buried them when they sanitized their original position, but the rough terrain they're now moving into offers many opportunities for natural concealment. They soon come upon a wadi that offers a reasonable amount of security and decide that it will suffice till nightfall. After the midnight firefight, Hussein's forces know that American commandos are in the area, but ongoing airstrikes have given the Iraqis plenty of other things to worry about, and their movement has been heavily restricted for scores of miles in all directions.

The only enemy assaulting the men is a determined legion of sandfleas, which tirelessly press their attack. They do, however, also receive periodic visits from various Air Force jets. The pilots make it a point to fly close enough to the DELTA team to scout for hostile forces, yet their seemingly random passes are conducted at varied-enough intervals to give no clue to the whereabouts of the hidden soldiers.

Night comes quickly and the temperature drops like a stone even before the sun disappears from the horizon. As the four men make their final equipment checks before moving out, help is crossing the Saudi–Iraq border 100 miles to the southeast. Boring through the gathering fog at 60 feet off the ground, a lone MH-60 Black Hawk is finally on its way to retrieve the soldiers.

Almost 10 hours have passed since Rodgers was extracted, and Van Hee's team starts to move south again. The welcome night engulfs the dirty, unshaven troopers, and their night-vision goggles allow them to move with the assurance of prowling nocturnal beasts unencumbered by darkness.

In spite of the sophisticated NVGs and their apparent isolation, the desert holds one more surprise. As they near the pickup point, a young goat herder casually emerges from a depression 40 yards to their right. Upon seeing the ghost-like

An E-3A Sentry at Dhahran, Saudi Arabia.

apparitions, he runs screaming through the darkness, scattering livestock in all directions. Fearing a return of Iraqi soldiers, the team moves through the area quickly and sets up a defensive perimeter 600 yards from their encounter. Speaking in hushed tones with the inbound chopper, Van Hee guides the bird in until the troopers can be seen on its infrared imager.

As the Black Hawk's wheels touch the hard-packed dirt, the remaining four troopers scramble aboard and slide across the metal floor plates to hold each other in an embrace only those who have faced the ultimate challenge know. "We made it!" Gleason yells above the pitch of the engines as the helicopter begins to rise above the desert floor.

After looking out of the waist gunner's hatch for any signs of Iraqi forces, Van Hee wearily leans back and says, "Christ, I hope so."

## The Final Manifest Call

### *Epilogue to the First Edition*

Along Ardennes Road, framed by a stand of regal North Carolina pines, the John F. Kennedy Special Warfare Center Chapel occupies a place of dignity and serenity. Against the hustle and organized chaos that characterizes this sprawling airborne post, it provides a safe haven of sanity and peace whether the visitor is a regular churchgoer or just passing through.

Framed against the gathering clouds of an incoming spring rain, a memorial service is taking place. It is a closed service to avoid the prying eyes of newspaper reporters still trying to write stories about *Desert Storm*. Although the service was unannounced, the chapel is crowded. Word has passed quickly around the special operations community that one of their own is being remembered today. Conspicuous in their off-the-rack suits, cowboy boots, and nonregulation mustaches and haircuts, the members of a DELTA troop have gathered once more. Along with their wives, they are here to help the young widow weather one more storm. It is a unique scene—one that rarely occurred in the past few years but has often been repeated since the operations "over there."

The widow's five-year-old son, sandy blond hair neatly combed and out of character, sits on the edge of his front-row seat. Gently poking an imagined spot on the chapel's maroon carpet with the toe of his Sunday best, he absently wonders, not quite knowing or understanding why he is here. He is aware that his mom's world is in disarray, and her sadness is something he has never seen before. All he knows is that the man whose

A special operations helicopter streaking at low level across the night sky.

picture occupies the table in front of the chapel is not coming home. His father left home late one night "on business." That was not an unusual occurrence in his young life, but now a new twist has occurred. Mom said that his best friend has gone to live with God forever.

His father's friends, gathered around the family in a supportive ring, knew the story all too well. The smiling young soldier, pictured with the coveted green beret, had been their friend, and in this close-knit group of professionals, that one word, *friend*, was all that required their loyalty.

The emotion of these men was not a complicated show. Each behaved simply but with a degree of maturity in combat that comes only to a veteran. They accepted what was thrown their way, hiding their hatred, fear, confusion, and pride behind the mantle of a well-trained special operations soldier. To this group and the many others like them, the specter of death was always a member of the team. In this particular case, their friend was no longer able to avoid death's embrace. Thousands of miles away, hidden in an unmarked grave deep in Iraq's rugged western province, their trusted friend and the young boy's father had rested until a subsequent team, under Gary Van Hee, recovered his lifeless form.

As the chaplain exhorts the group not to grieve but to pray for the Great Jumpmaster's protection of their comrade's soul, people's thoughts drift to other places, other actions, and other services. And the veterans of *Desert Storm* reflect on the madness of the previous few weeks.

Hanging back a little from the rest of the mourners, a grizzled old warrior remembers similar services after *Desert I, Urgent Fury, Just Cause*, and drifts back to the days before he left Smoke Bomb Hill to join DELTA at the old stockade. His thoughts go back to the Green Beret Parachute Club, its cold beer, warm friendships, and the old jukebox nestled in the corner next to the pool tables. He smiles to himself as he remembers that one song, a song from an unpopular war that saw so many of the special operations community answer the requirements of the ultimate test. Though not all DELTA troopers were initially special forces–qualified, most ended with that qualification, and an old war song expressed best the thoughts and feelings of this moment: "Her Green Beret has met his fate."

It's not all glory and gunsmoke in the realm of special operations—especially in covert operations. Boredom spans months, and then moments of sheer gut-wrenching, piss-in-your-pants horror strike out of the blue. But that's what they signed up for. No yellow ribbons, no victory parades, no grand celebrations would greet these secret warriors. Just a gentle hug, a kind word, or a pat on the back that seemed to say, "Well done." That, and, "Clean up your gear and get ready for the next one!"

And there *will* be a next one—somewhere, sometime. And odds are that DELTA will be used not as it was during Iraq's stinging defeat, but in its traditional counterterrorist role.

For over a quarter of a century, the former Soviet Union and its surrogates in Eastern Europe, Latin America, and the Middle East gave safe haven to the world's most dangerous international terrorists. The collapse of Soviet communism, coupled with the shutting off of terrorist's revenue by oil-rich Persian Gulf states angered over their backing of Iraq, have left terrorist organizations in disarray. Increasingly isolated politically and cut off from training and supplies from Europe and money from the Gulf, they bicker among themselves over how best to satisfy their grudge against the West and any Middle Eastern government unappreciative of their past deeds. They are, to put it bluntly, out of work and out of cash.

But the breather this has given the West is likely to be short-lived. As the world speeds toward the twenty-first century, it finds itself with more wild cards in its deck of nations. The familiar bipolar dominance of the United States and the former Soviet Union is gone for good, as the evil empire disintegrates into numerous successor states of ques-

tionable stability. These new countries are, themselves, not homogeneous entities and are likely to be rent by factional fighting in the decade to come. They are also the inheritors of at least 27,000 nuclear weapons. Despite pronouncements of their good intentions, their desperate need for hard currency and sporadic control of their own territory may result in some leakage of nuclear weapons or, more likely, nuclear materials and production expertise into the hands of terrorists.

This threat to peace and a ghastly new form of warfare—environmental terrorism—may also cause elite counterterrorist units like DELTA to retool their operational methods. The sight of massive oil slicks released in the Persian Gulf and black clouds boiling up from oil fires to shut off the noonday sun will not be lost on the next generation of would-be terrorists. Moreover, their twisted logic will lead some terrorists to use the results of *Desert Storm* to add fuel to whatever cause they favor.

A soldier is laid to rest.

Dozens of captured Palestinian and Shiite terrorists have been dumped into this cauldron of change, let loose by the Iraqis when they invaded Kuwait or released by the Israelis as part of the package deal that freed a handful of Western hostages. Like the wandering freelance warriors of feudal Japan who traded their violent skills for gold and fame, these modern-day *ronin* are available to any would-be despot or group fanning the flames of ethnic or religious unrest across Europe, Asia, and the Middle East. Key terrorist networks remain intact, and a number of groups and individuals dropped from sight when the vigilance of America's intelligence assets was directed to combat in the Gulf. Now that the flex of security operations has fallen to its normal lull, the specter of terrorists finding new work in the developing chaos is very real, and Americans abroad are, as always, notoriously easy targets for any group desiring big headlines.

The pros of DELTA are ready.

Chapter 7

# The '90s: SAME THREAT —NEW FACES

*War is the continuation of politics by other means.*
*—Mao Tse-Tung, "On Protracted War," 1938*

*War is not the continuation of policy. It is the breakdown of policy.*
*—Hans von Seekt, Thoughts of a Soldier, 1930*

A force of special operators (DELTA, Rangers, and SOAR) practice for a search-and-seize mission at a Fort Bragg training site.

The 1990s was a busy decade for DELTA. The unit received numerous upgrades in equipment to help fix the deficiencies exposed during the Scud hunt in Iraq. The SOT became the beneficiary of many enhancements to its already state-of-the-art equipment, such as more realistic targets and special cameras for low-light resolution. New training scenarios were also developed for situations that the squadrons would inevitably face.

Former DELTA officers also rose to prominence within the special operations community during this period. Chief among them was Peter J. Schoomaker, a DELTA squadron commander from 1978 to 1981 and 1985 to 1988, he occupied the unit's top slot from 1989 through 1992 and rose to command the most senior and demanding Army and joint special operations billets before retiring in 2000. Because of his unique experience, abilities, and his deep understanding of the Army's future needs in the global war on terror, Schoomaker was pulled from his well-earned retirement to become U.S. Army chief of staff in 2003.

Personal protection and liaison duties remained a priority during the 1990s, and DELTA continued to provide backup for federal, state, and local agencies at select high-profile events that might prove tempting to terrorists. The security force for one such event, the 1996 Olympics in Atlanta, was the largest U.S. peacetime security operation ever conducted. (Although much larger numbers of DELTA troopers were available for the 2005 presidential inauguration ceremonies, it was arguably a "wartime" contingency.) There was also no shortage of world conflicts where the National Command Authority called on DELTA's services.

## Operation *Amber Star*

The Dayton Peace Accord was signed in 1995, ending a three-year civil war in the former Yugoslavia that left half a million dead, and the checkerboard of Serbian and Bosnian areas in Bosnia-Herzegovina settled into a wary peace under the control of IFOR (Implementing Force) troops. When the larger, heavier Stabilization Force (SFOR) later entered these areas, DELTA and British SAS personnel led the way as covert reconnaissance units. Additional missions assigned to DELTA personnel included providing support as part of the World Courts' security force, capturing and securing suspected war criminals for transport to The Hague for trial. DELTA operatives were part of the task force supporting Operation *Amber Star* in 1997 with missions specifically targeting the Serb leader Radovan Karadzic. They and their intelligence support element, ISA, also entered target areas in search of persons indicted for war crimes (PIFWCs) and to monitor the movements of other suspected war criminals.

## Code Name *Centra Spike*

Trooper and Combat Talon crew chief prepare for a night Fulton recovery mission.

Pablo Escobar rose to prominence in 1983 as one of the strongest members of Colombia's drug cartels. So vicious and brazen were his activities and those of the other cartels that they soon gave rise to the term narco-terrorism. The foundation for the term was the alliance forged by Escobar's murderous Medellin Cartel and the Marxist guerrillas operating with near impunity in the cocaine-producing areas of Colombia. In 1989, the Colombian government requested special operations assistance from the United States, and ISA personnel initiated operations under code name *Centra Spike*. DELTA troopers entered the picture in 1992 as "advisors" to the Colombians, and Escobar's violent death in December 1992 is surrounded by rumors that DELTA snipers were directly involved in the takedown. However, there is little evidence to support this contention.

## Operation *Uphold Democracy*

In the early 1990s, the Caribbean island of Hispaniola was again a focal point of violence. A military junta ousted Haiti's first freely elected president Jean-Bertrand Aristide and, together

A Somali gunman of warlord Mohamed Farrah Aidid sprints to a new firing position among scurrying children who act as cover for his tactical movements.

with remnants of the *ton-ton macoutes* secret police, suppressed Aristide's supporters. An agreement was reached that the junta would relinquish power, but a U.S. Navy ship carrying the initial elements of Joint Task Force Haiti Assistance was threatened and forced to withdraw from the Haitian capital, Port au Prince, in October 1993. Several high-ranking Americans, including Colin Powell and former president Jimmy Carter, as well as United Nations officials were sent to Haiti in late 1994 and 1995 to initiate negotiations for the peaceful entry of a U.S. stabilization force and to assess election preparations. The accompanying personal security detail (PSD) was comprised of DELTA troopers, including marksmen.

## Lima Takedown

In 1996, the Japanese ambassador's residence in Peru was seized by terrorists during a large diplomatic reception. The Peruvians conducted the operation to free the hostages, which included foreign ambassadors and senior Peruvian officials, with their own CT forces. Peruvian special forces had received training from U.S. special operations mobile training teams, and additional support during the operation was provided by DELTA advisors. An SAS team was also sent to Lima because of the presence of diplomatic personnel among the hostages. The embassy takedown was successful.

## Operation *Allied Force*

DELTA troopers were deployed to support the NATO move into Kosovo in 1998—Operation *Allied Force*. According to sources close to the operation, DELTA assets were tasked to collect intelligence on Serbian command centers and armored units. When the NATO air campaign was initiated, DELTA was on call to quickly rescue any downed pilots captured by the Serbs. An additional mission was to be prepared to conduct snatch operations against individuals on the World Court's expanding list of most-wanted war criminals, including Serbian president Slobodan Milosevic.

## Taking a Knife to a Gunfight—Operation *Irene*

While most DELTA missions in the 1990s were of the just-doing-business variety, the repercussions of one operation had an impact every bit as profound as the disaster at *Desert I*.

As noted in Chapter 2, the exploits of Germany's GSG-9 in October 1977 occupies a rightful place on lists of successful operations. But the location of their mission—Mogadishu, Somalia—will also be remembered for another operation where, despite uncommon valor and sheer guts, the cost of success was far too high. Like so many other American military actions, the Battle of Mogadishu (also called the Battle of the Black Sea) would again signify the bravery, professionalism, and dedication of the individual special operator.

The United States entered the swirling insanity of Somalia's civil war in December 1992 with Operation *Restore Hope*. Under President Bill Clinton's new administration, a multinational UN force assumed control of operations in a "stabilized" Somalia in May 1993.

Enter "General" Mohamed Farrah Aidid, chairman of a faction within the Hawiye clan's political party and the tribal warlord of the Habar Gidir sub-clan in southern Mogadishu. Aidid's continual efforts to destabilize the humanitarian mission, and his intertribal warfare, culminated in an ambush that left 24 Pakistani peacekeepers dead and a bomb detonation that killed four U.S. solders. In only a few months, the situation in Mogadishu had again nose-dived into chaos.

The media-savvy warlord had clearly initiated combat operations against UN/U.S. forces, and President Clinton decided that Aidid needed to be permanently removed from the television screen. With no prior experience in this type of conflict, Clinton and his senior defense and state department chiefs rushed into the same trap that ensnared former President Lyndon Johnson in the 1960s. He tried to run a war from the White House.

Task Force Ranger (TFR), composed principally of Special Operations Forces, was deployed to Mogadishu in late August 1993. TFR staff officers soon found themselves besieged—not by Somali militiamen—but by "command guidance" from Washington targeting Aidid and his top commanders for snatch-and-scoot operations. Several missions were executed, but most made little or no progress. Intelligence operatives, however, did provide the special operations planners with a target, and Operation *Irene* was hatched.

Additional firepower was critical to this operation. The available force would not be able to use darkness to offset their smaller numbers (as they normally did). After a detailed mission analysis, Joint Special Operations Command (JSOC) planners recommended—and the commander requested—increased backup in the form of armored personnel carriers and tank support. These assets would be used for the extraction phase of the operation, and provide assets for a quick reaction force (QRF).

One of the two crash sites in Mogadishu where special operations personnel and aircraft where lost during the battle.

Clinton and his senior advisors did not want it to appear that the U.S. was increasing its military presence in Africa and were concerned that adding heavy forces would send the wrong signal. But they didn't understand that overwhelming force was required. Secretary of Defense Les Aspin reportedly went along with the crowd although he knew the ground commanders should be in control. Lower down the chain of command it was also decided to withhold AC-130 Specter gunships from the operation.

Task Force Ranger (TFR) was given the mission of capturing key Aidid lieutenants Omar Salad and Mohamed Hassan Awale in a combination air–mobile and ground operation converging on their hideout near Mogadishu's Bakkara Market.

The plan called for 1st SFOD- DELTA (A) and SEAL Team Six attachments to fast-rope rappel, then search, capture, and secure the high-value targets (HVT), while providing inner security. Company B, 3rd Battalion, 75th Ranger Regiment (Airborne), provided the muscle. Rangers would fast-rope rappel, and then secure a square perimeter on four corners of the operation's target area while other Rangers, using vehicles, conducted the extraction operation of air–mobile force and high-value targets (HVT) from the target area.

The 160th SOAR (A) was to provide air support for the infiltration, assault, and exfiltration of the TFR ground convoy using MH-6, AH-6, fast-rope-capable MH-60, and UH-60 command and control-capable airframes. After-action reports and interviews with participants indicate that the air–mobile

DELTA snipers Master Sergeant Gary Gordon (A) and Sergeant First Class Randy Shughart (B) earned the first Medal of Honors awarded since the Vietnam War for actions above and beyond the call of duty when saving the life of SOAR pilot Michael Durant in Mogadishu. DELTA troopers Timothy Martin, Earl Fillmore, and Daniel Busch also made the supreme sacrifice during the mission, and team leader Sergeant First Class Matthew Rierson was killed several days later by a mortar round. Said Durant "Without a doubt, I owe my life to these two men and their bravery. . . . Those guys came in when they had to know it was a losing battle. There was nobody else left to back them up. If they had not come in, I wouldn't have survived." The events of this mission have been well documented in the book and movie *Black Hawk Down*. In 1996, the U.S. Navy named two ships after Shughart and Gordon. At Fort Polk's Joint Readiness Training Center (JRTC), the largest town inside of "The Box" is named "Shughart-Gordon." *(B) Courtesy parents of Randy Shugart and www.jenmartinez.com.*

force and ground convoy was composed of approximately 180 personnel, 14 vehicles, and 20 helicopters.

The 10th Mountain Division's 14th Infantry Regiment readied a quick-reaction force (QRF) to assist the extraction if Task Force Ranger ran into trouble. Initially company-sized, events would necessitate that the QRF use all of the regiment's 2nd Battalion and the division's AH-1 attack helicopters.

Joint Task Force Command Center (Forward) would be located with the airborne command and control with all TFR elements monitoring the command frequency. Operational support including medical evacuation would follow standard operating procedures for what was planned to be a quick snatch of some bad guys.

The assault force operators approached their target and, as their aircraft lined up for the final approach, code words to execute the operation were transmitted over all communications nets. "Irene, Irene, Irene" was clearly heard, sending Rangers and DELTA troopers fast roping into their objectives.

This was the last part of the operation to follow the plan.

Anyone who's been in combat knows that a plan is only good until the bullets start to fly! A Ranger was seriously injured when he lost his grip while fast roping and ended up in a crumpled heap below the chopper. But the chopper was also in serious trouble as shoulder-fired rocket-propelled grenades hurtled past the cockpits and open troop doors.

As the assault force searched for their captives, an MH-60 was hit by an RPG-7 and crashed into the street below. The alarm "Black Hawk down!" was heard across the communications net. The extraction force wasn't doing much better. The vehicles were being delayed by local militia and civilians who were erecting obstacles and barricades and igniting tires in an effort to block the extraction team. As the vehicles were slowed or halted, the convoy was assaulted by rocks, AK47 fire, and then RPGs.

The majority of the assault force, having observed the crash of the MH-60, initiated a rescue effort that quickly turned into a major gun fight. More than 90 Rangers and DELTA operators were effectively pinned down at the crash site by the local militia, whose ranks swelled to several thousand.

Then a second MH-60, call sign Super 64, was downed. The pilot and only survivor of the crash was Chief Warrant Officer Mike Durant, and his situation was perilous at best. Super 64 had crashed in full view of the marketplace, and an angry Somali

mob was approaching the crash site. Flying overhead, two DELTA snipers, Master Sergeant Gary Gordon and Sergeant First Class Randy Shughart saw the impending danger as they aimed fire on the well-armed mob. After numerous radio calls requesting permission to assist Durant, they were finally permitted to be inserted and move to the injured pilot's side.

Shughart and Gordon took up defensive positions to protect Durant against the Somali mob. Armed with a ridged stock MP5 and an M1A/M14, these two soldiers took on the crowd. The Somali militiamen shielded themselves with willing women and children to try to prevent the Americans from returning fire. The 7.62 Gatling guns wreaked a vengeance like none before, but everyone's best efforts couldn't save the men from the angry mob. Mike Durant, the lone survivor, was taken hostage while the stripped, mutilated bodies of his protectors were dragged before the TV cameras.

Throughout the night, the assault force and part of the QRF beat off attacks by the militia. At daylight, they fought their way out with the invaluable assistance of a Malaysian force of armored personnel carriers, and evacuated to a nearby Pakistani compound.

## Aftermath

Operation *Irene* extracted a high cost in human life. Eighteen Americans and two Malaysians perished, and some 78 Americans, seven Malaysians, and two Pakistanis were wounded. Based in analytical results from the gunship tapes, an estimated 700 to 1,000 Somalis were wounded and 300 died. Losses to Aidid's forces were so severe that he was never able to extend his control beyond southern Mogadishu. He was ousted as the leader of his own political faction and died as a result of gunshot wounds in 1995.

The failure to provide tanks and armored personnel carriers was costly to the Clinton administration. As the nation's commander in chief, Clinton demanded that the on-the-ground commander take full responsibility—in writing—for the failure of the operation. This ax fell on the commander of the special operations task force, Brigadier General William Garrison, who followed orders and wrote the letter. But according to reliable sources, someone in the special operations community exacted a degree of revenge. The letter was delivered to the White House—along with an edited version of the "best" gunship footage. Sources indicated that there were green faces and queasy stomachs at the White House after viewing the tape.

An AH-1 Cobra gunship returns fire on Somali gunman.

A patrol moves through the close confines of Mogadishu's Bakara Market.

For their sacrifices on October 3, 1993, Sergeant First Class Randall D. Shughart and Master Sergeant Gary L. Gordon were awarded of the Medal of Honor. They were the first members of DELTA to be so honored and were the first recipients of the award since the Vietnam War. President Clinton presented the medals to their next of kin and offered his hand to Shughart's father at the conclusion of the ceremony. Standing tall, and looking the commander in chief in the eye, Mr. Shughart refused his outstretched hand and said, "You are not fit to be president." When tracked down later by a *Wall Street Journal* reporter, Mrs. Shughart said that the president offered no reply.

Mr. and Mrs. Shughart turned and left the reception.

Chapter 8

# AFGHANISTAN AND IRAQ

*Now I shall go far and far into the north, playing the Great Game. . . .*
*—Rudyard Kipling, 1901*

In the aftermath of al Qaeda's 9/11 attack, a piece of the World Trade Center hangs precariously after sheering down through a building across the street. *FEMA*

Since the time of Peter the Great, numerous nations and adventurers, traders, soldiers, explorers, intelligence agents, and spies, have ranged over Central Asia in what Kipling referred to as "the Great Game." In October 2001, as a result of the September 11 terrorist attacks in New York and Washington, D.C., the world—and more specifically Afghanistan—was introduced to the American version of this time-honored exercise.

U.S. forces learned many important tactical and operational lessons in Mogadishu, but the shadowy, well-financed al Qaeda terrorist organization led by Osama bin Laden came away with its own "lesson learned." Bin Laden maintained in interviews and communiqués that the quick American withdrawal from Somalia proved that the United States was far weaker than the Soviet Union, which fought for years in Afghanistan before calling it quits. The weak—sometimes nonexistent—military responses to al Qaeda's increasingly deadly bombings against Americans in the Middle East and Africa did nothing to disabuse him of this notion.

Al Qaeda agents and the Taliban militia, which supplied them a secure base of operations in Afghanistan, quickly learned after the bombing of American embassies in Africa, the U.S. compound at Khobar Towers in Saudi Arabia, and the USS *Cole* in Yemen, that they had finally gone too far on 9/11. Americans suddenly woke up to the fact that they were at war. A special operations team member in Afghanistan neatly summarized Americans' reaction, "Don't piss in the wind, don't sword fight with Zorro, and do not piss off the United States of America and George Bush!"

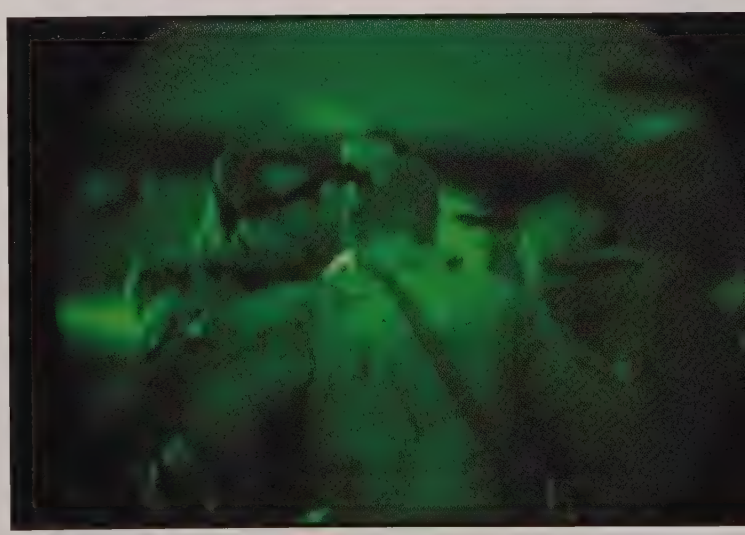
Military operations in the region fell under the direct control of the U.S. Central Command (CENTCOM). Unlike in Somalia, the White House did not interfere while appropriate forces were shifted to the region as quickly as possible. CENTCOM's rapid introduction and integration of special operations and paramilitary specialists with conventional assets, such as B-52 bombers and Navy attack aircraft, had a far-reaching and devastating impact on the architects of the September 11 attacks.

DELTA's participation in Operation *Enduring Freedom* began with their arrival at a base known simply as K2. This not-so-covert installation was an old Soviet air base just north of the Afghan border in Uzbekistan. It was also the headquarters of Task Force Dagger, as the teams principally from 5th Special Forces Group (Airborne) were known.

DELTA's retaliation for 9/11 began on the night of October 19 as part of the newly formed Task Force 11, which was created to target suspected or known terrorists and eliminate them through snatches, capture, or other means. They conducted an air-mobile raid and takedown of a Taliban compound near Kandahar, and although they gathered some intelligence, their primary target, Commander of the Faithful Mullah Mohammed Omar, could not be found. Omar, a long-time friend and reputed father-in-law of bin Laden, was the guiding force behind the Taliban's strict interpretation of Islamic law and use of Afghani territory under his control for al Qaeda training and staging facilities. A significant fight ensued, and DELTA was reported to have sustained heavy casualties but no deaths.

The swift, violent war conducted against al Qaeda and Taliban forces in Afghanistan saw the use of the full range of special operations techniques and procedures. The close cooperation of the many special operations units (foreign and domestic) can only lead the student of unconventional warfare to recognize this theater of operations as a special operators' paradise.

But on November 25, 2001, the paradise erupted into a living hell. Thousands of detainees were held at the ancient fortress of Qala-i-Jangi, where the basics of how to segregate and handle unpredictable prisoners of war were carelessly cast aside. Al Qaeda operatives, Taliban militia, Islamic volunteers from Pakistan, Iraq, Iran, Saudi Arabia, along with Chechen, Somali,



During preparations for a night resupply operation in Afghanistan, a special operator has to shout over the roar of an MC-130's engines to be heard.

The flight engineer of an MH-53M prepares for a search-and-rescue mission during operations against al Qaeda and the Taliban. The "Pave Low stinger" by his side is a 7.62mm minigun.

and Western—including American—fighters took over the prison. An ad hoc force, consisting of every friendly element within driving distance, had to first contain, then retake Qala-i-Jangi the hard way—one brick at a time. The friendlies included DELTA, SAS, special forces, CIA operatives, and some 10th Mountain Division troops, along with Northern Alliance soldiers and militiamen. Nearly 500 Taliban and al Qaeda operatives were killed in the three-day battle.

With bin Laden's escape from Afghanistan and the appearance of one of his chief lieutenants, Ayman al-Zarqawi, in Baghdad, America turned its sites on Saddam Hussein's Iraq. Even before al-Zarqawi's arrival from Afghanistan, Hussein had long harbored arch-murderer Abu Nidal in Baghdad, and was now supplying funds not only to Hammas and the PLO, but also to families of Palestinian suicide bombers in Israel. A sworn enemy of the Unites States who invaded two of his neighbors and fired intermediate-range ballistic missiles at two others, who used poison gas against Iran and his own Kurdish citizens, Hussein's power and standing in the Muslim world was clearly on the rise. With UN sanctions imposed after the Gulf War steadily unraveling and soon to leave him free to expand or restart his weapons programs, the Bush administration decided to preempt the threat by removing Hussein and his regime from power.

## Going Downtown

After a frenzied deployment to the Gulf, troopers settled into a boring daily routine at B Squadron's forward operating base near Kuwait City. Dressed in sterile (no identifying name tags or unit patches) desert battle dress uniforms and desert boots, the squadron's teams practiced close-quarter battle, zeroed weapons, and prepared to take the battle to Saddam Hussein and his followers.

At 1400 hours, Chief Warrant Officer John McAlister's businesslike stride indicated that something was brewing. Known as Big Mac because of his fondness for hamburgers, McAlister had just returned from a briefing with the operations and intelligence staff section. Settling lightly on an olive drab cot, he directed the team to gather 'round.

"We have received a warning order for a mission tomorrow night," Mac said, as he slowly canvassed the faces of his team.

Without referring to his notes, McAlister briefly laid out the broad plan. The team would infiltrate into Baghdad, support the Air Force with laser guidance of smart munitions against a high-value target, conduct battle damage assessment, and exfiltrate.

The remainder of the team's time was spent in preparation, briefings, and rehearsals. Each man was prescribed a load that is constantly updated and reduced to the required items needed for the mission. The operators would infiltrate wearing dark soccer warm-up suits, running shoes, and no head gear. With their beards, mustaches, and warm-ups (like many young Iraqis wear), the team would be able to blend in.

Each man would carry an A-III assault pack loaded with compasses, first-aid kits, communications equipment, high-energy rations, ammunition, windbreakers, and water in CamelBak bladders. Carefully packed in one assault pack was an enhanced version of the Special Operations Forces laser marker (SOFLAM), far superior to the MULE target designator used by DELTA in the 1991 Gulf War. After the command and staff had been backbriefed in detail, team members inspected, rehearsed, and test-fired weapons.

As the operators walked out to the edge of the airstrip, their Air Force MH-53J Pave Low sat next to the staging area like a giant sleeping prehistoric creature. Situated some 20 meters from the primary staging area, a second gray Pave Low was also being readied for the mission. One crucial practice in special operations planning is 100-percent redundancy. Operators do not cherish the thought of a one-way trip, and this group was no different. The second aircraft would accompany the infiltration as backup. Inside were para-rescue and combat-control special operators from the Air Force's Special Operations Command. Their mission was to aid in a follow-on infiltration if the primary aircraft went down or to assist in extraction if the landing zone (LZ) was hot and the mission had to be aborted.

As the team became accustomed to the desert night, the Pave Low's crew made its final checks. Under the glare of red lights, the command pilot and McAlister covered last-minute details, procedures, checkpoints, and code words. The copilot then reviewed emergency actions and procedures with the crew and team members.

The team lifted its A-III packs and secured its weapons. Two men carried Heckler & Koch MP5 SD3 submachine guns, a silenced version of the sturdy 9mm submachine gun that's essential for silent elimination of an enemy. The remainder of the team carried AKM47s, a reliable folding-stock version of the venerable Kalashnikov assault rifle

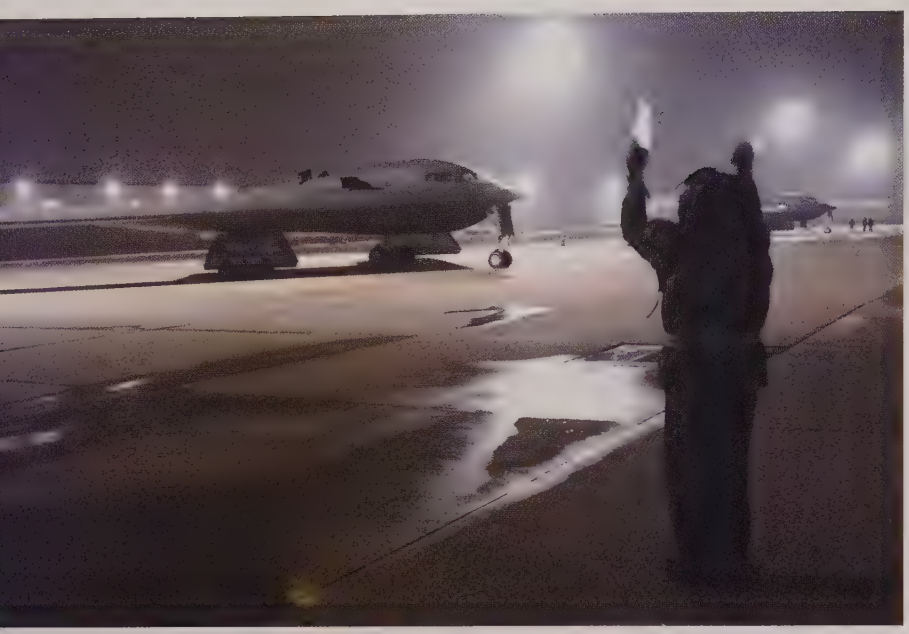
An airman aboard an MH-60G Pave Hawk peers through night-vision goggles during operations in Iraq.

commonly found in hands of Iraqi civilians. The only light came from the helicopter's red interior lights. Big Mac, George, Ra-Ra, Jumpmaster, Tom, and Jesus (pronounced hey-zeus) walked up the ramp in reverse order, sat down opposite each other, and buckled their seatbelts. Eight red nylon troop seats, four to a side, sat at the rear of the aircraft.

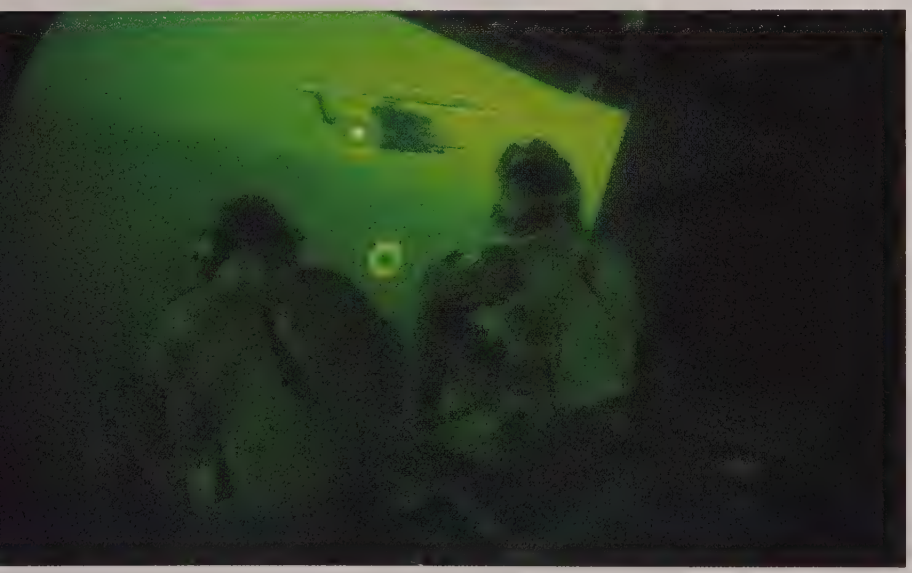
Big Mac sat down, put on the combination earphones/microphone, and made a communications check with the pilot. He scanned the dim interior, noting the positions of the right and left gunners. McAlister noted that team members were wearing their ear plugs and holding their weapons between their knees, muzzle down. The team settled into its seats and tried to relax.

## Infiltration

The team's low-level flight to the LZ felt like a rollercoaster ride but was otherwise uneventful. As the helicopter streaked past the various checkpoints, the pilot notified Mac. In turn, Mac passed this critical information to the team members. Checkpoint information dated back to World War II operations when members of Britain's Special Operations Executive (SOE) and the American Office of Strategic Services (OSS) were informed of current locations in the event they had to bail out before the designated release



A B-2 stealth bomber at Whiteman Air Force Base, Missouri, moments before it lifts off for a precision strike in Iraq.



Airmen aboard an MH-53J Pave Low observe a sister ship during night refueling operations.

point. That way, operatives were not totally lost and stood a better chance of surviving and locating their contacts.

The infiltration was being monitored from an Air Force AWAC flying high overhead, while a pair of A-10 Warthogs lazily bore holes in the night sky. Their easy and graceful flight patterns hid the destructive power they were prepared to unleash.

Ten minutes before landing, the team was given the final checkpoint. Weapons were rechecked to confirm that rounds were in the chambers and magazines secured. The Pave Low glided into the landing zone with its nose flaring slightly high. At this point, the follow-on helicopter took up a racetrack flight pattern in preparation to support extraction efforts if required. NVGs were not reliable in the dust storm the Pave Low was creating, so each operator wore standard-issue dust goggles. As the MH-53J bounced to a halt, the first two operators raced down the ramp into the talcum dust and peeled off in opposite directions to take up defensive positions 15 meters from the aircraft. The rest of the team followed.

Assault packs were thrown to the desert floor, and operators fell in behind with weapons pointed into the darkness. The Pave Low lurched into the night sky, made a sharp turn to port, and headed for home. Within seconds, the chopper was gone and only silence surrounded the team. The six men effortlessly rose as one, secured their packs, and headed southwest at a loping trot. Their pace was easy and steady, and their NVGs helped them avoid obstacles.

One hour later, the team reached the rendezvous point. While Mac rechecked his GPS, the team established 360-degree security. Then two vehicles slowly pulled up on the dirt road fronting the team's position. A woman exited from the passenger side of a beat-up Mercedes and approached their position. Knowing that she was under surveillance and likely in the sights of a silenced weapon, she made sure her movements were deliberate and slow. The ISA operative removed a small light with an IR filter from her robes and signaled with three dots and a dash. Leaving his weapon and equipment, Mac walked slowly toward the woman, who said in a distinct Brooklyn accent, "Welcome to Baghdad."

The team split into two three-man groups and climbed into the Mercedes and an old Volkswagen van for the short drive into the city. Iraqis were starting the day with the traditional Muslim calls to prayer as the vehicles entered a run-down garage at a safe house, where they were met by the rest of the ISA reception committee. The ISA team had been in the city for several weeks; they had procured safe houses, transportation, water, food, and information. The DELTA operators were shown to rooms where sleeping pallets were positioned. They tried to rest while the

reception team handled the security duties. Even with security duties handled by ISA, one DELTA operative was always alert. Security responsibilities cannot be delegated.

## You Can Run, But You Can't Hide

At 1930 hours, the team reviewed the operation for the last time. Moving to the vehicles, four operatives loaded into the green VW van while the other two got into the Mercedes. The vehicles cruised through the streets, avoiding military checkpoints and, after an hour, arrived at a closed tobacco shop one city block from a restaurant frequented by Hussein and his henchmen. The restaurant (and the entire city block) was built atop a deep underground bunker nearly 20 years earlier, during the Iran–Iraq war. Not known to this particular team, several other of Hussein's hangouts were also being "serviced" throughout the city. Big Mac's team was infiltrated to this recently discovered location because of specific intelligence information that a meeting was to take place.

The team took position on the roof of the three-story shop and established satellite communications with the squadron. Team members took turns watching the target area through a rubber-coated spotter scope. All they could do was wait—and not be discovered by the Iraqis.

At 2330 hours the activity on the streets below began to subside. Ra-Ra, the communications specialist, sat hunched over his compact SATCOM. The earpiece crackled as the weapons officer onboard a B-2 bomber made his initial contact with the team after a 14-hour flight from Whiteman Air Force Base in Missouri. It lazily orbited the sprawling city, silent and unseen, on the chance that one of the teams would site the Ace of Spades. Contained in its high-tech belly was a bunker buster, a second-generation smart bomb designed to penetrate deeply into the earth and destroy bunker systems.

With virtually no activity on the street below, a motor home and its SUV escorts pulled in front of the targeted restaurant. Only Hussein and the most senior Iraqi officials were known to use motor homes to move around in comfort and anonymity. The convoy was easily seen by George, who kept his eyes on the target and raised a thumbs up signal with his left hand.

Ra-Ra bent over to where Big Mac lay stretched out on the roof. "Contact," he said, and the team moved slowly into position. The B-2 was notified while Jesus painted an invisible laser marker on the restaurant. "Target is marked," said Ra-Ra, as he passed the information to the now-incoming bomber and stood by for notification of bomb release. Within seconds, the B-2 notified the team of the bomb's release. For approximately two minutes, the bomb glided toward the earth and its target.

A soldier provides outer security during a raid in Kirkuk.

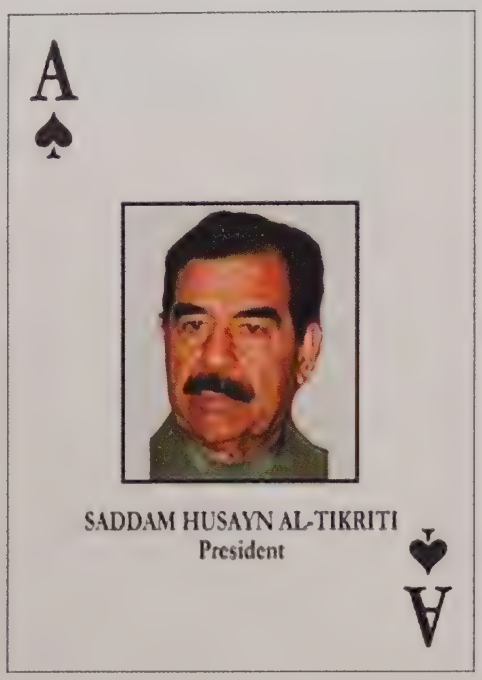
With astounding shock and power, the bunker buster slammed into the ground, driving deep into the earth and exploding. Although they were a city block away, the team members bounced up and down on the roof like so many ping pong balls. After the shockwave and tremendous explosion, the team was soon threatened by falling debris.

Mac and Jesus peered through the dust with their scope and binoculars and were astonished to see a large crater at least 50 meters in circumference. Mac gave Ra-Ra the thumbs up, and the message was transmitted to the bomber: "Target destroyed. Out."

The team assessed the destruction and policed the area while waiting for the confusion in the street below to build. In groups of two, they made their way to the ground floor where they were met by an ISA operative. All six DELTA troopers piled into a Mercedes and exited the area with due haste. Pandemonium reigned in the streets, but such extreme confusion offered a better chance of avoiding security forces.

The ISA operative exited the vehicle at a pre-arranged location and Tom got behind the wheel. Approaching the desert, Tom dropped off the road onto a deserted track northwest of the city and continued as far as possible before the Mercedes became mired in deep sand. Piling out of the car, the team shouldered the packs and weapons and, after a quick check of men, equipment, and their position, the team moved out at the casual trot they knew so well. Next stop, the pickup zone (PZ), and with luck and skill, an uneventful ride to Kuwait.

Mission accomplished—or was it?




Saddam Hussein, "Ace of Spades" in central command's deck of most-wanted cards distributed throughout Iraq.

## Ace of Spades

Task Force 121 was initially established in Afghanistan to hunt down bin Laden's al Qaeda and Taliban allies and to complement the Special Operations Forces participating in Operation *Iraqi Freedom*. Its assets come from the best operatives of the joint special operations community. Elements from the 10th Special Forces Group, 160th Special Operations Aviation Regiment, SEAL Team Six, and DELTA provide the on-the-ground commanders with a potent strike force for counterterrorist operations or a precision snatch team to capture or neutralize high-payoff targets (HPTs).

For many years, special operators from DELTA had been searching for and securing war crime suspects in the Balkans. The tactics, techniques, and procedures perfected in that dismal theater of operations were brought to bear in another theater where misery, death, and hatred ruled supreme.

At Baghdad International Airport, Warrant Officer 3 Pat Hamilton, a veteran of 20 years, had just eased his massive frame into a folding chair in front of the team's portable computer when he heard the squadron's executive officer (XO), who was acting as liaison to Task Force 121, let out a squeal of delight. Holding the satellite phone away from his mouth, he yelled, "Hot damn! Hey Chief, round up the team. Intel indicates that the Ace of Spades has been located! *Red Dawn* is a go!"

With that information, the hanger became a hub of intense activity as the Task Force 121 operators policed up their equipment, which had been placed in individual piles for easy access.

Operation *Red Dawn* is one of the finest examples of special operations, conventional forces, and external agencies working in close cooperation and coordination to successfully accomplish a very sensitive mission. The term "Ace of Spades" refers to the position Saddam Hussein occupies in a specially produced deck of cards containing pictures of the 52 most wanted Iraqis.

Colonel Jim Hickey, Commander of the 4th Division's Raider Brigade, was the man with the target pinned on his back. The weight on the officer's shoulders was massive—it was his job to capture Hussein alive. The command structure, from the White House down to the commanding general, did not wish to explain to the world why another operation had resulted in the death of a Hussein family member. The highly publicized deaths of Saddam Hussein's two sons had taken place just months earlier when U.S. forces attempted to take them captive.

## Rat in a Hole

Launching in blackout configuration and using NVGs, special operations aviation assets skimmed over the dark Iraqi terrain. Like angry bumblebees, the MH-6 Little Birds descended into landing zones around a farm near Ad Dawr, due south of Saddam Hussein's tribal sanctuary of Tikrit. The farm had been searched before, but only after a great deal of information analysis and the interrogation of numerous subjects had Hussein's possible hiding place been revealed by an informant and targeted.

Springing from their seats on the sides of the MH-6s, Task Force 121 soldiers quickly moved into supporting positions, where they could cover the areas being searched by members of the raider brigade. Each operator carried a modified Colt M4 chambered in 5.56mm that was factory modified with low-visibility rear sights, laser sights, and high-intensity flashlights controlled from the shooter's pistol grip.

The immediate area reminded Chief Hamilton of a laser light show at a rock concert. But only one color—red—was visible. This vision was soon shattered by the crackle of radio transmissions. Saddam Hussein's hole had been found!

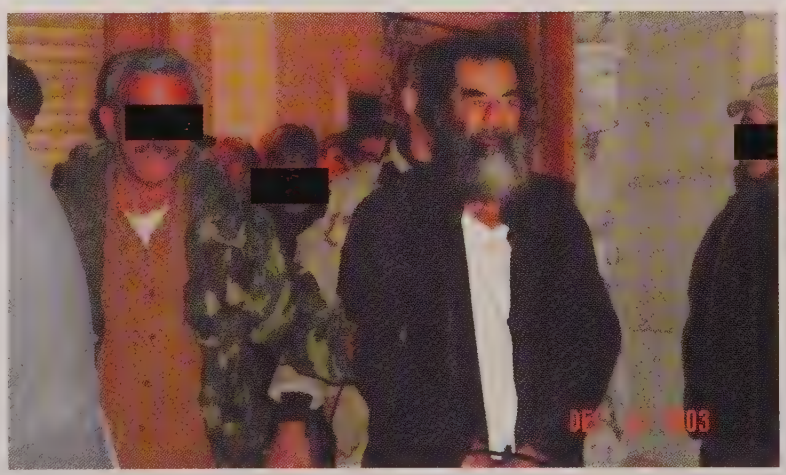
Soldiers stood with weapons ready as the styrofoam plug was removed, revealing an unkempt individual. Rising slowly out of the hole, hands held high, the man reportedly said in Arabic: "I am Saddam Hussein. I am president of Iraq, and I am willing to negotiate." Even in defeat, this tyrant, whose heroes were Hitler

and Stalin, still felt he was in control. However, a special operator dispelled any thoughts concerning who was in charge. "President Bush sends his regards," he calmly replied. Saddam Hussein was pulled from his hole and searched. His 9mm pistol was removed from his belt and a grateful President Bush stated in a television speech that it was presented to him by DELTA troopers. As Hussein was being prepared for transportation, he became belligerent and spit in a soldier's face. His attempt to resist brought Chief Hamilton out of the shadows, and Hussein went down with several other operators assisting. He was restrained with flex cuffs and an empty sandbag placed over his head. Moving with the swift action gained only through countless hours of rehearsals, the operators strapped the Ace of Spades into an MH-6 for a hasty exfiltration.

A prisoner processing point was established at Saddam Hussein's palace in Tikrit, and the MH-6 landed in a heavily guarded area. Before the bird had fully landed, Hussein was off-loaded and rushed into a medical receiving area, where special forces medical personnel, along with combat photographers, thoroughly searched and photographed the dictator.

Saddam Hussein is subdued after becoming "uncooperative" during his capture. The President-for-life and Chairman of the Revolutionary Command Council, Hussein began to argue and was brought down after he spit in a trooper's face.

The initial concern for those guarding Hussein was that he would attempt suicide. So Hussein received the royal treatment—a full body cavity search for suicide pills. After all, his idol, Hitler, was among the notable Nazis who cheated the hangman's noose. After the inspection, he was given a quick physical, fingerprinted, photographed, and bundled back onto a chopper for a fast ride to Baghdad.



After his apprehension, Saddam Hussein was brought into a temporary holding area in Tikrit.

The airspace was alive with all manner of gunships, SIGINT-collecting helicopters, and UH-60s carrying reaction forces. In a secluded, heavily guarded aircraft parking area, an MC-130 Combat Talon stood ready to depart. Eight seasoned veterans casually stood 60 feet away from the Talon making small talk. The easygoing atmosphere was shattered when a member of the Special Operations Combat Control Team ran to the area where the chopper was to land. Yelling over his left shoulder, "six minutes out!" was all the team needed to move into position near the LZ. Armed with pistols, the team prepared to escort Saddam Hussein to his flight.

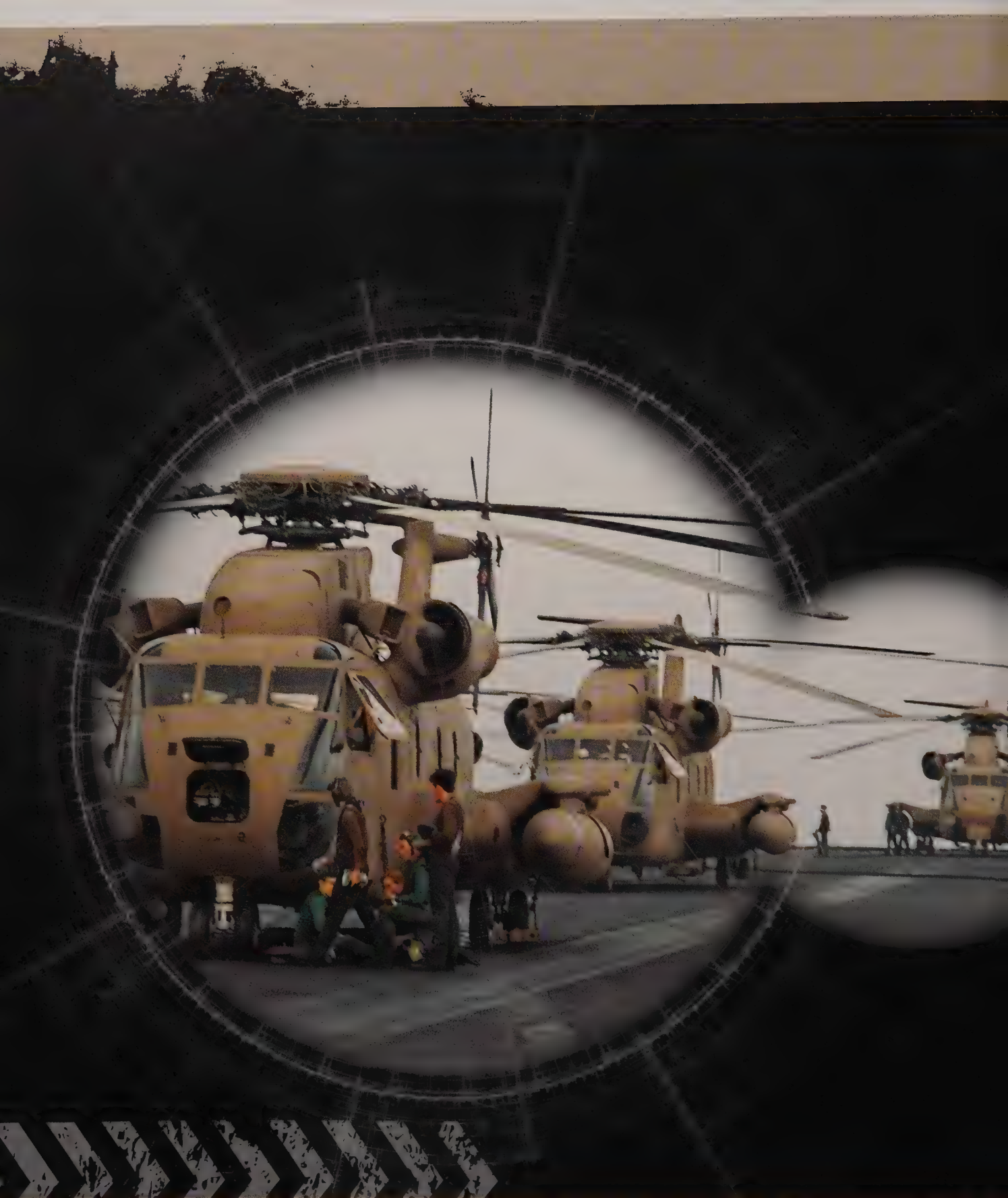
The chopper landed perfectly. As soon as the door opened, Hussein was transferred to four sets of waiting hands. His feet barley touched the ground as he was whisked up the rear ramp into the waiting aircraft's cavernous cargo bay. The team secured him in a seat as the ramp came up, and the aircraft began its taxi for takeoff. Without stopping, the Combat Talon roared onto the runway and into the clear darkness of the Arabian night.

As the Talon flew out of sight, Chief Hamilton leaned back against his aircraft, spit some snuff out the side of his mouth, and said to no one in particular, "Wish we'd nailed that S.O.B last time." In some ways, the victory seemed hollow, but in retrospect, they all felt the same sense of loss, the same sense of pride, and the same sense of accomplishment.

"Hell," Hamilton said as he and his team slowly headed toward the hanger that was their home, "What I need is a cold beer."

Mission accomplished.

# MARSOC



CHAPTER 1

# ORIGIN OF SOCOM

IN THE EARLY MORNING HOURS of May 2, 2011 (Pakistan time), an elite team of American commandoes from SEAL Team Six completed a special operations mission that killed Osama bin Laden, the head of al Qaeda, America's most implacable enemy in the global war on terror. Superb intelligence, training, preparation, coordination, and execution are the hallmarks of this success. Although this is only the most notable of America's special operations victories, it serves as confirmation that the future of modern warfare will be increasingly in the hands of our special operations forces, "the quiet professionals."

It was not always so.

In November 1979, a group of radical Iranian "students" captured the U.S. embassy in Tehran, Iran. The United States Air Force rushed to regenerate its special operations capabilities. By December 1979, a rescue force was chosen, and training commenced. Training exercises were conducted through March 1980, and on April 16, 1980, the Joint Chiefs of Staff (JCS) approved the mission. On the nineteenth, rescue forces consisting of Army, Navy, Air Force, and Marine assets began to deploy to Southwest Asia. Delta Force, as this composite unit was called, was tasked with the assault on the embassy and the rescue of the American hostages.

On April 24, after six months of failed negotiations, the National Command Authority (NCA) ordered the execution of Operation Eagle Claw to free U.S. hostages held in Iran. Under cover of darkness, eight RH-53D helicopters departed the aircraft carrier USS *Nimitz* on station in the Arabian Sea; at the same time, six C-130s left Masirah Island, Oman. Both sets of aircraft set off for a prearranged site six hundred miles into the desert, code designation "Desert One." The Achilles' heel in the operation proved to be the helicopters; a few hours into the mission, two of them had aborted due to mechanical failure. A desert dust storm, known as a *haboob*, caused the remaining helicopters to arrive late, and yet another suffered a hydraulic leak that its crew determined was unfixable at the Desert One site. This determination resulted in only five operational helicopters, and mission planners had ascertained a minimum of six were required for the mission to continue. Now, with only five available, the mission was aborted.

Many books and articles have been written describing the mission in detail, so we will not belabor the operation here. Simply stated, the plan was to assemble eight Navy RH-53D helicopters at a predetermined location in the Iranian wasteland code-named "Desert One." During the night, the helicopters would be refueled from KC-130 tankers (also having landed in the desert), load a 120-man Army assault team aboard, and proceed to two additional hide sites. The Delta assault team would continue on to the U.S. embassy, extract the hostages, rendezvous with the helicopters, and be extracted out of the city. That never happened.

With the decision to abort, it was time to load up the aircraft and "get out of Dodge." While repositioning his RH-53D helicopter for refueling, one of the pilots collided with a C-130. This resulted in the two aircraft rapidly being engulfed in flames. With the situation hastily moving from bad to worse to disastrous, the on-scene commander, Col. Charlie Beckwith, decided to load all the survivors,

OPPOSITE: Three RH-53 Sea Stallion helicopters line up on the flight deck of the nuclear-powered aircraft carrier USS *Nimitz* (CVN-68) in preparation for Operation Eagle Claw. The covert mission's objective was to rescue American hostages being held in the U.S. embassy in Tehran, Iran. DOD PHOTO

remaining troops, assault team, and Marine aircrews onto the C-130 and depart Desert One as soon as possible. Eight men had been killed and five more injured. Five intact helicopters, the burned wreckage of the helicopter and C-130, and the dead soldiers were left behind. Operation Eagle Claw had failed and cost the lives of eight gallant troops. It would also cost the honor of the United States of America and the credibility of U.S. Special Operations.

The disaster that transpired at Desert One was the culmination of years of post–Vietnam era thinking among U.S. commanders that had led to the decline of special operations capabilities during the 1970s. During that time, there was a marked distrust between special operations forces and the conventional military. This was further denigrated by significant cuts in funding for special operations forces (SOF) units and missions.

Following the disaster at Desert One, the Department of Defense appointed a review committee known as the Holloway Commission to look into problems within U.S. Special Operations. The commission was chaired by Adm. James L. Holloway III and included Gen. Leroy Manor, who had commanded the Son Tay raid into North Vietnam. The outcome of this inquiry resulted in two major recommendations. First, the Department of Defense needed to establish a counterterrorism joint task force (CTJTF) as a field organization of the JCS with a permanently assigned staff and forces. The JCS would plan, train for, and conduct operations to counter terrorist activities directed against the United States. The CTJTF would utilize military forces ranging in size from small units of highly specialized personnel to larger integrated forces. Second, the JCS needed to consider the formation of a Special Operations Advisory Panel (SOAP) consisting of high-ranking officers to be drawn from both active service and retired personnel. The prerequisite for selection was a background in special operations or service at a commander in chief (CINC) or JCS level, and participants needed to maintain a proficient level of interest in special operations or defense policy.

One issue raised by the commission concerned the selection of helicopter aircrews. Were the pilots up to the task? Why had they selected the Marines when more than a hundred qualified Air Force H-53 pilots were available? If we look at today's standards, the Marine pilots had big boots to fill. They were being asked to fly at night, which was unusual practice for the "flying leathernecks." These pilots were asked to launch off the deck of a carrier *at night*, fly nap-of-the-earth where radar could not detect them, and fly without running lights. The pilots were issued PVS-5 night vision goggles; however, they could only be worn at thirty-minute intervals. This meant the pilot and copilot had to alternate flying the huge helicopter every thirty minutes. The Marines had no pilots that had been trained in this type of flying. In fact, none of the services were prepared for such a contingency. Yet the Marines did what they always do: they adapted, overcame, and improvised.

Regarding the helicopters, the commission concluded that a minimum of ten to twelve helicopters should have been deployed. This redundancy in air assets would have secured a higher probability of success if problems arose, assuring that six helicopters, the minimum requirement for completion of the mission, would be operational at Desert One. The legacy of this decision may prove to hamper future special operations. It was this commission's direction that spawned interest in the V-22 Osprey, redesignated the MV-22 and CV-22 for use in Marine and Special Operations Forces.

Another issue was the lack of a thorough readiness assessment and schedule of mission rehearsals. From the onset, training was not conducted in a truly joint method. Due to security and logistical considerations, the training was compartmentalized and held at scattered locations across the continental United States, as well as abroad. The limited rehearsals conducted could only evaluate various segments of the entire mission. Additionally, preparation was carried out at the individual and unit levels within each element.

There was no designated mission commander for six months, breaching the principle of unity of command. This lack of command and control hampered the training, planning, and execution of the operation. There were separate commanders for site security, ground force, landing support, KC-130s, and the helicopter force. Compounding the problem were procedural limitations and communications interoperability.

US SOCOM organization chart.
MARSOC

While the mission itself ended in disaster, Desert One did serve to strengthen the resolve of some within the Department of Defense to reform SOF. As Lt. Gen. James Vaught (Ret.), who commanded the rescue task force, commented in later years: "Eagle Claw was a successful failure. We wanted with all our being to rescue the Americans. However, had we succeeded, conventionalists in all likelihood would have said we did not need a full-time training and ready force which could quickly and successfully rescue Americans the world around. [Without Desert One] we would not have the competent, proven, ready special operations forces that are today the envy of the world."

Indeed, Desert One served as a catalyst for the evolution of the U.S. Special Operations Forces, and seven years later, on April 13, 1987, President Ronald Reagan approved the establishment of the new command. The Department of Defense activated USSOCOM on April 16, 1987, and nominated Gen. James J. Lindsay to be the first Commander in Chief, Special Operations Command (USCINCSOC).

## USSOCOM

Overseeing all of the U.S. Special Operations Forces is the U.S. Special Operations Command (USSOCOM), located at MacDill Air Force Base in Tampa, Florida. Today, each of the services—Army, Air Force, Navy, and Marines—has a command subordinate to SOCOM. An additional subordinate command under SOCOM is the Joint Special Operations Command (JSOC).

The mission of SOCOM is to provide capable special operations forces (SOF) to defend the United States and its interests. SOCOM also plans and synchronizes Department of Defense (DOD) operations against terrorist networks. America's SOF units are organized, equipped, trained, and then deployed by SOCOM to meet the high operational demands of geographic combatant commanders (GCCs) around the globe. To accomplish those missions, SOCOM focuses on three priorities: The first is to deter, disrupt, and defeat terrorist threats to the United States. This is accomplished by planning and conducting special operations, emphasizing culturally

attuned international engagement, and fostering interagency cooperation. Second, the command is to develop and support the SOF members as well as their families. Third, SOCOM must sustain and modernize the SOF units by equipping the operators, upgrading their mobility platforms, and further developing continuing intelligence, surveillance, and reconnaissance (ISR) sensors and systems. These priorities support SOCOM's ongoing efforts to ensure SOF members are highly trained, properly equipped, and deployed to the right places at the right times for the right missions.

SOCOM units are capable of planning and conducting a variety of lethal and nonlethal special operations missions, both complex and ambiguous in austere environments. The U.S. SOF is made up of small units that work alone or in combination with one another in both direct and indirect military operations, often utilizing tactics of unconventional warfare. These "quiet professionals," as they are often called, are trained in the newest methods, tactics, and procedures, and are equipped with the latest technology and weaponry. The soldiers, sailors, Marines, and airmen who constitute SOCOM units exceed the capabilities of conventional military forces. Each of the services' units cross-train in many of the same techniques, tactics, and procedures (TTP), and there are times when their missions overlap. Their missions are frequently clandestine in nature and often politically sensitive. In military operations other than war (MOOTW), it may be necessary to deploy a small force to stealthily accomplish missions directed from National Command Authority. Such missions would be assigned to the appropriate SOF unit.

## UNITED STATES ARMY SPECIAL OPERATIONS COMMAND (USASOC)

### Special Forces

U.S. Army Special Forces Command (Airborne) (USASFC[A]) is comprised of seven major subordinate units. Each of these units, known as Special Forces groups,

7th Special Forces Group (Airborne) soldiers move alongside each other during urban combat training at Fort Bragg, North Carolina. They are armed with the MK 18 carbine, a modified M4A1 with a shortened 10.3-inch barrel and fitted with a close quarters battle receiver (CQBR). U.S. ARMY PHOTO, SGT. DANIEL LOVE, 7TH SFG(A) PAO

Soldiers from the 75th Ranger Regiment (Airborne) descend in an MH-6 Little Bird helicopter flown by pilots from the 160th Special Operations Aviation Regiment (Airborne) during an exercise demonstrating the range of U.S. Army Special Operations capabilities at Fort Bragg, North Carolina. USASOC PHOTO, TRISH HARRIS, PAO

is commanded by a colonel. The mission statement of the SF Command is "to organize, equip, train, validate and prepare forces for deployment to conduct worldwide special operations, across the range of military operations, in support of regional combatant commanders, American ambassadors and other agencies as directed."

In addition to the military skills the SF soldiers possess, they are schooled in the cultures, traditions, and languages of the regions in which they operate. This ability makes them aptly proficient in behind-the-lines, covert, and unconventional warfare missions.

## Rangers

The 75th Ranger Regiment is the Army's premiere light infantry rapid assault force assigned to SOCOM. The unit's primary mission revolves around DA (or direct action) predominant operations. The soldiers of the 75th have one purpose in life: to kill the enemy and break things. Their specialty is airfield seizure, though they are also more than capable of conducting raids, combat search and rescue (CSAR), special equipment, and performing other light infantry operations. They may be inserted and extracted by land, sea, and air. Ranger units focus on

A U.S. Navy SEAL, armed with the FN special operations assault rifle–heavy (SCAR-H), which is chambered for 7.62mm ammunition, takes up a defensive position in a village in northern Zabul province, Afghanistan, on April 10, 2010. Afghan National Army soldiers, assisted by U.S. Special Operations members, investigated the presence of drug facilities in the province. U.S. NAVY PHOTO, MCCS JEREMY L. WOOD

mission-essential tasks, including movement to contact, ambush, reconnaissance, airborne and air assaults, and hasty defense.

The 75th Regiment maintains a constant state of readiness, and can be deployed anywhere in the world. On any given day, one Ranger battalion serves as Ready Reaction Force (RRF) 1 with the requirement to be "wheels up" within eighteen hours of notification. Additionally, one rifle company with battalion command and control can deploy in nine hours.

## The 160th Special Operations Aviation Regiment (Airborne)

The 160th Special Operations Aviation Regiment (Airborne) (SOAR[A]) provides aviation support to U.S. Special Operations Forces. Primarily an Army asset, the 160th has a close working relationship with other units under the SOCOM command. The majority of its missions are carried out under the cover of darkness; hence, the unit has earned the nickname of the "Night Stalkers." The 160th Regiment's equipment includes MH-6 Little Bird light assault helicopters, MH-60 Blackhawk utility helicopters, and MH-47 Chinook medium-lift helicopters. Additionally, some of the regiment's Little Bird and Blackhawk helicopters, respectively known as AH-6 and MH-60L DAP, have been configured for close air support (CAS) missions. The unit's specialty is the covert insertion, resupply, and extraction of SOF teams. Additionally, the soldiers may conduct armed escort, reconnaissance, surveillance, and electronic warfare in support of missions.

The regiment is home to the "hottest" aviators in the Army, and, some operators will go on to add, "in the world."

The Night Stalkers maintain several types of helicopters in their inventory, from the small and agile Little Birds to the larger Chinooks, so that if SOF needs to perform a fast rope insertion/extraction system (FRIES) on a rooftop, request CAS, or extract from a "hot" landing zone, the 160th SOAR(A) has the aircraft, pilots, and aircrews to accomplish the task, plus or minus thirty seconds. The unit's motto is "Night Stalkers don't quit!" These consummate flyers are the perfect complement to the covert warriors of SOF.

## NAVAL SPECIAL WARFARE COMMAND

### Navy SEALs

The term *SEAL* is an acronym for **SE**a, **A**ir, and **L**and. Navy SEALs are qualified in diving and parachuting and are experts at combat swimming, navigation, demolitions, weapons, and many other skills. SEALs operate in small units called platoons. Squad size is typically eight men with two squads per platoon. In addition to the maritime environment, SEALs train in the desert, in the jungle, in cold weather, and in urban surroundings. Their forte is the

Two special operations craft riverine (SOC-R) boats cruise along the Salt River during live fire training. Naval special warfare combatant-craft crewmen (SWCC) from Special Boat Team 22 (SBT-22) employ the SOC-R, which is specifically designed for the clandestine insertion and extraction of Navy SEALs and other Special Operations Forces along shallow waterways and open water environments. U.S. NAVY PHOTO, MCCS ROBYN B. GERSTENSLAGER

quick DA raid, and they usually are not equipped for long, protracted contact with the enemy.

### Special Boat Teams

Special warfare combatant crewmen (SWCC) are members of special boat teams (SBT), which pilot a variety of special warfare craft, from brown-water riverine vessels to the blue-water Mark V special operations craft (SOC). While they aren't SEALs, they do support SEAL personnel and other SOF units during their maritime and riverine missions, and they conduct unconventional small boat operations, such as coastal and riverine patrols.

A selected number of SEALs are tasked with the operation of the SDV, or SEAL delivery vehicle. These are small submersible craft that allow the SEALs to covertly infiltrate an enemy harbor or other waterborne target.

## AIR FORCE SPECIAL OPERATIONS COMMAND

AFSOC is the Air Force element of SOCOM, and its mission is to provide mobility, surgical firepower, covert tanker support, and special tactics teams. These units will normally operate in concert with U.S. Army and Navy Special Operations Forces, including Special Forces, Rangers, the Special Operations Aviation Regiment, SEAL teams, PSYOP forces, and civil affairs units. AFSOC supports a wide range of activities from combat operations of a limited duration to longer-term conflicts. The unit also provides support to foreign governments and their militaries. Dependent on shifting priorities, AFSOC maintains a flexible profile, allowing it to respond to numerous missions.

AFSOC brings the "big guns" in as close air support of any SOF mission. With the AC-130H Spectre and the flagship of the 4th Special Operations Squadron, the AC-130U Spooky gunships, bristling with 25mm chain gun, 40mm Bofors cannon, and 105mm howitzer, the unit brings new meaning to the phrase, "Death from above." An AFSOC combat controller on the ground and a gunship overhead are among the most lethal weapons in the SOCOM arsenal.

### Special Tactics Squadron

In addition to its awesome airpower, AFSOC may deploy special tactics squadrons composed of combat controllers and pararescuemen. Special tactics teams (STT) are proficient in sea-air-land insertion tactics into forward, nonpermissive environments. Combat control teams (CCT) establish assault zones with an air traffic control (ATC) capability. An assault zone can be a drop zone (DZ) for a parachute deployment or an LZ for heliborne

An AC-130U gunship of the 4th Special Operations Squadron. The gunships of the Air Force Special Operations Command provide close air support (CAS) for Special Operations Forces. Their ability to loiter in an area for an extended period of time makes them ideal weapons platforms in support of SOF missions. USAF PHOTO

operations or follow-on fixed-wing aircraft. It can also be for an extraction or low-level resupply.

The combat control teams are also responsible for ground-based fire control of the AC-130 Spectre gunships and helicopters of AFSOC, as well as having responsibility for *all* air assets, including Army and Navy aircraft. In addition to these capabilities, CCTs provide vital command and control capabilities in the forward area of operations (AO) and are qualified in demolition to remove obstructions and obstacles to the LZ/DZ.

Also included under the command are the special operations weather teams (SOWT). Their mission is to

provide meteorological and oceanographic information in and for the special operations theater of operations. Their functions include tactical infiltration, data collection, analysis and forecasting, mission tailoring of environmental data, and joint operation with host nation weather personnel. SOWT personnel perform this job from forward-deployed bases or, at times, from behind enemy lines using tactical weather equipment and an assortment of communications equipment.

## JOINT SPECIAL OPERATIONS COMMAND (JSOC)

JSOC was created in 1980 and "officially" is a joint headquarters designated specifically to analyze U.S. Special Operations requirements and techniques, as well as to ensure interoperability and equipment standardization for U.S. SOF units. JSOC plans and conducts joint special operations exercises and training; the command also develops joint special operations tactics, equipment, and development. Also operating under JSOC are two units so secret that the Department of Defense does not even acknowledge their existence. These are the Army's Delta Force and the Navy's Development Group. Although each unit has an expansive capability, and latitude, their primary mission is counterterrorism (CT).

## U.S. MARINES AND SOCOM

When SOCOM was created in 1987, it became responsible for all special operations forces in the U.S. military (i.e., Army Special Forces, Rangers, and the 160th Special Operations Aviation Regiment; Air Force Special Operations wings and squadrons; and Navy SEALs). Although the Navy placed the SEALs under this new command, the Marines would not be included.

An interesting fact is that prior to the official creation of SOCOM, a member of the U.S. Congress approached

Air commandos from the 720th Special Tactics Squadron perform fast-rope insertion methods from a CV-22 Osprey tilt-rotor aircraft from the 8th Special Operations Squadron. Both units are based at Hurlburt Field, Florida. USAF PHOTO

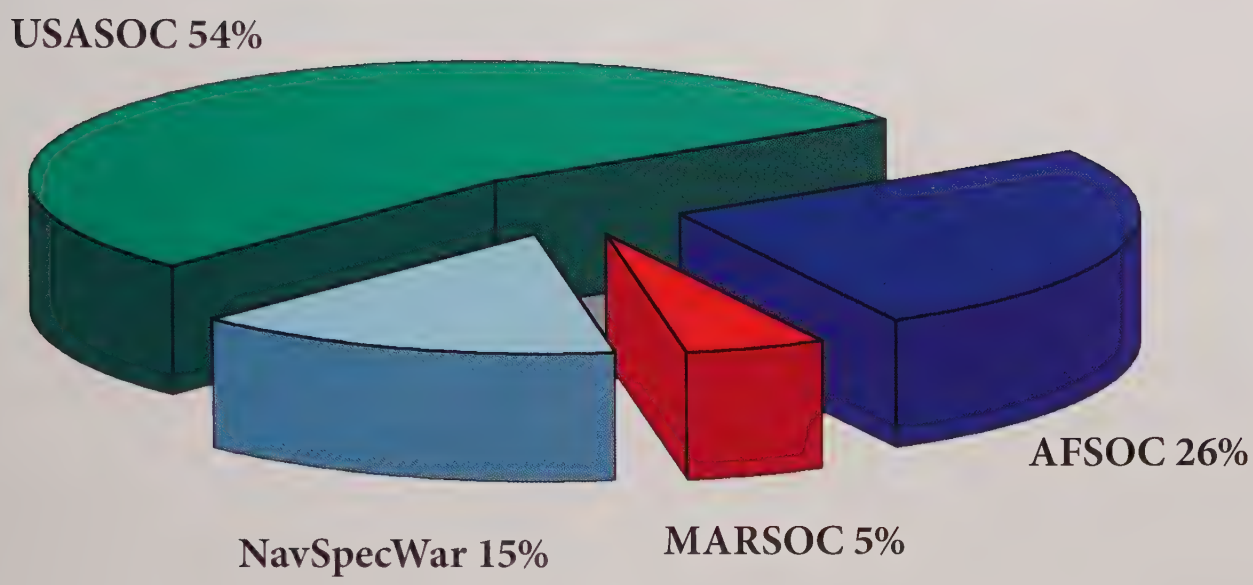
Gen. Paul X. Kelley with the proposition that all SOF units be placed under the command of the Marine Corps. The commandant was not receptive to the proposal, explaining that it would impact the Marine Corps mission around the world. Furthermore, while the Marines would not become plank owners of SOCOM, Force Reconnaissance Marines were trained in the same special operations skills as those in the SOF community.

There are a number of theories why the Marines were not included. One is that SOCOM had all aspects of the battlefield covered—land (Army), sea (Navy), and air (Air Force)—hence, the addition of the Marines would have been a duplication of forces. The most popular theory relates that General Kelley, who was the commandant at the creation of SOCOM, did not want to relinquish command and control of the Marines to an Army general. It is also a known fact that during the reorganization, many members of Congress, who themselves had served in the Corps, preferred the Marines to maintain their autonomy. While the Force Recon Marines processed the same special operations capabilities as their sister services, the consensus was that eventually Force Recon would end up being absorbed into SOCOM and would no longer be available to support Marine Expeditionary Units (MEUs) or Marine Expeditionary Forces (MEFs). Consequently, the Marines did not become part of SOCOM and were not categorized as special operations forces but rather were special operations capable, or SOC; hence, the designator MEU (SOC).

In January 2002, the commandant presented the first official plans outlining the permanent force contribution the Marines could bring to SOCOM. In the course of developing this concept, three potential plans of action materialized: First, the Marines would support SOCOM with the unique capabilities of their forward-deployed Marine Air-Ground Task Forces (MAGTFs). These MAGTFs would augment and sustain SOF capabilities. Second, Marine units would be OPCON (operational control) to SOCOM on a recurring or rotational basis to execute designated missions. Third, the Corps would provide Marine forces to be permanently assigned to SOCOM as part of a Marine Special Operations component, or MARSOC.

General Paul Xavier Kelley served as the commandant of the Marine Corps from July 1983 until June 1987. Word on the street, or rather in the foxholes, was that General Kelley did not want to relinquish command of his Marines to a separate command under the control of a U.S. Army general. Hence, the Marines were not included when SOCOM was created. USMC PHOTO

On February 24, 2006, the Marine Corps Forces Special Operations Command (MARSOC) officially became the Marine component of SOCOM. MARSOC conducts the manning, organizing, training, and equipping of Marine Special Operations Forces to accomplish its mission. The MARSOC headquarters, located at Camp Lejeune, North Carolina, is responsible for identifying Marine special operations–unique requirements; developing MARSOC tactics, techniques, procedures, and doctrine; and executing assigned missions in accordance with designated conditions and standards.




Percentage chart of SOCOM service forces. MARSOC

## SPECIAL OPERATIONS PRINCIPAL MISSIONS

According to the SOCOM posture statement, nine activities have been designated as special operations principal missions: direct action (DA), combating terrorism (CBT), foreign internal defense (FID), unconventional warfare (UW), special reconnaissance (SR), information operations (IO), civil affairs (CA), counterproliferation of weapons of mass destruction (CP), and psychological operations (PSYOP). SOF is organized, trained, and equipped specifically to accomplish these nine tasks. These tasks as related by SOCOM are listed below.

### Direct Action (DA)

DA operations include short-duration strikes and other small-scale offensive operations principally undertaken by SOF to seize, destroy, capture, recover, or inflict damage on designated personnel or matériel. While conducting these operations, SOF may employ raid, ambush, or direct assault tactics; emplace mines and other munitions; conduct stand-off attacks by fire from air, ground, or maritime platforms; provide terminal guidance for precision weapons; and conduct independent sabotage and antiship operations.

### Combating Terrorism (CBT)

CBT is a highly specialized, resource-intensive mission. Certain SOF units maintain a high state of readiness to conduct CBT operations and possess a full range of CBT capabilities. CBT activities include antiterrorism (AT), counterterrorism (CT), recovery of hostages or sensitive material from terrorist organizations, attacks on terrorist infrastructure, and reduction of vulnerability to terrorism.

### Foreign Internal Defense (FID)

FID involves participation by civilian and military agencies of a government in any of the action programs taken by another government to free and protect societies from subversion, lawlessness, and insurgency. SOF's primary contribution in this interagency activity is to organize,

A member of the Marine Special Operations Battalion (MSOB) trains for a direct action (DA) raid. The Marine Special Operations Command (MARSOC) officially became an active component of SOCOM in 2006.

### HOW MARSOC FITS SOF CORE VALUES

**Quality is better than quantity**
MARSOC will formalize training procedures to ensure MARSOC Marines meet or exceed SOF standards.

**Competent SOF cannot be created after emergencies occur**
MARSOC will take decisive, deliberate methodical steps to increase U.S. special operations capabilities so its Marines and sailors are better able to anticipate and prevent emergencies in the future.

**Humans are more important than hardware**
MARSOC will establish clear screening, assessment, and selection standards to ensure MARSOC Marines are mature, experienced, capable warfighters.

**SOF cannot be mass-produced**
MARSOC will build its capabilities deliberately and methodically.

train, advise, and assist host nation military and paramilitary forces. The generic capabilities required for FID include instructional skills; foreign language proficiency; area and cultural orientation; tactical skills; advanced medical skills; rudimentary construction and engineering skills; familiarity with a wide variety of demolitions, weapons, weapon systems, and communications equipment; and basic PSYOP and CA skills.

## Unconventional Warfare (UW)

UW includes guerrilla warfare, subversion, sabotage, intelligence activities, evasion and escape, and other activities of a low visibility, covert, or clandestine nature. When UW is conducted independently during conflict or war, its primary focus is on political and psychological objectives. When UW operations support conventional military operations, the focus shifts to primarily military objectives.

## Special Reconnaissance (SR)

SOF conducts a wide variety of information-gathering activities of strategic or operational significance. Collectively, these activities are called SR. SR complements national and theater intelligence collection systems by obtaining specific, well-defined, and time-sensitive information when other systems are constrained by weather, terrain-masking, hostile countermeasures, or conflicting priorities. SR tasks include environmental reconnaissance, armed reconnaissance (locating and attacking targets of opportunity), coastal patrol and interdiction, target and threat assessment, and poststrike reconnaissance.

### Information Operations (IO)

IO refers to actions taken to affect adversary information and information systems while defending one's own information and information systems.

### Civil Affairs (CA)

CA facilitates military operations and consolidates operational activities by assisting commanders in establishing, maintaining, influencing, or exploiting relations between military forces and civil authorities, both governmental and nongovernmental, and the civilian population in a friendly, neutral, or hostile area of operation. This mission, and the following two missions, are those of SOCOM and not necessarily MARSOC.

### Counterproliferation of Weapons of Mass Destruction (CP)

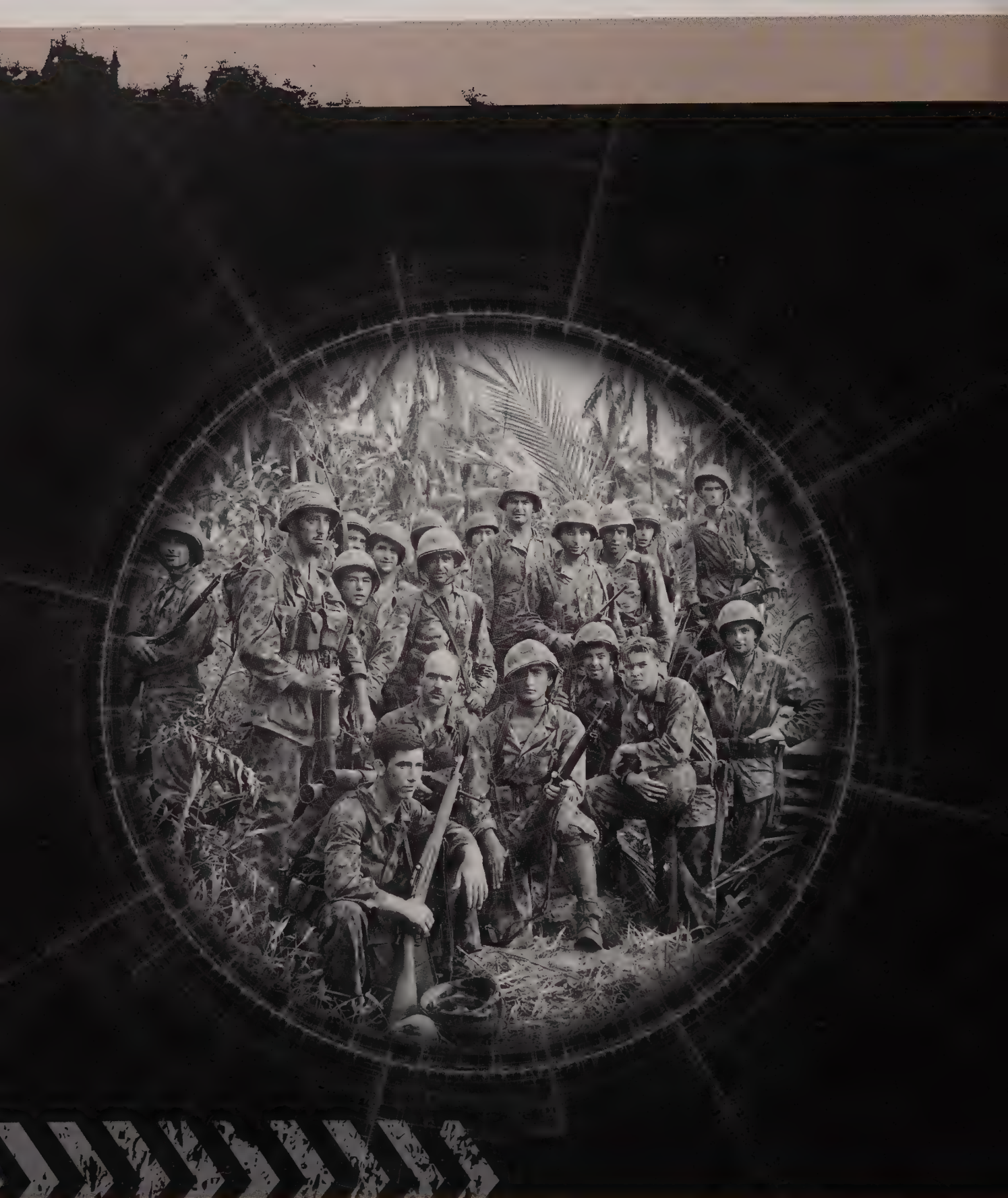
CP refers to the actions taken to seize, destroy, render safe, capture, or recover weapons of mass destruction (WMD). SOF provides unique capabilities to monitor and support compliance with arms control treaties. If directed, SOF can conduct or support SR and DA missions to locate and interdict sea, land, and air shipments of dangerous materials or weapons. SOF is tasked with organizing, training, equipping, and otherwise preparing to conduct operations in support of U.S. government counterproliferation objectives.

### Psychological Operations (PSYOP)

PSYOP induces or reinforces foreign attitudes and behaviors favorable to the originator's objectives by conducting planned operations. These operations convey selected information to foreign audiences in order to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals.

## IRREGULAR WARFARE (IW)

Irregular warfare (IW) is another mission area for SOF. Unconventional warfare, counterterrorism (CT), counterinsurgency (COIN), civil-military operations (CMO), civil affairs (CA), psychological operations (PSYOP), and foreign internal defense (FID) are all traditional IW activities and core tasks for SOF. With IW's emergence as a focus area for broader participation across the spectrum, it increasingly describes activities that both SOF and general purpose forces will employ in their operational approaches. IW doctrine calls for a suite of capabilities to prevail against those who threaten the United States. IW is a logical, long-term framework that assists in both analyzing and applying many elements of national and international power to achieve mutual security objectives. IW often employs indirect operations to gain asymmetric advantage over adversaries.



CHAPTER 2

# HISTORY OF MARINE CORPS SPECIAL OPERATIONS

MARINES ARE NO STRANGERS to the unconventional element of warfighting. The very nature of the Corps, the training and missions, elevates the Marines to the ranks of an elite. On occasion throughout the course of history, these select few have risen beyond the conventional warfighting role and prepared for and executed operations on par with any special operations unit past or present.

Less than twenty years after its war for independence, the fledgling United States of America would wage its first conflict on foreign soil at the beginning of the nineteenth century: the Barbary War (1801–1805). The North African Barbary coast was comprised of four states, nominally ruled by the Turkish Ottoman Empire but in practice given considerable autonomy in which to conduct their affairs: Morocco, Algiers, Tunis, and Tripoli. Sailing in the region were the Barbary Pirates, also known as the Barbary Corsairs, who roamed the waters taxing vessels, attacking ships, and capturing their crews. These Muslim pirates operated much like the Somali pirates of today, but with the sponsorship and support of their Arab rulers.

In the years following American independence, the major European powers paid tribute to the Barbary States in return for their ships being left to ply the Mediterranean unmolested, and the United States did the same. By 1801, however, the United States was behind in its payments, and in that year the bey (ruler) of Tunis, Yusuf Caramanli, declared war in the hope of collecting his tribute by force from the American ships his pirates attacked.

In response, President Thomas Jefferson deployed an armada of frigates, including a Marine expeditionary force, into the Mediterranean in order to defend America's interests in the region. By 1803 the Navy ships had established a blockade of all ports on the Barbary Coast, and its warships were attacking the Barbary Pirate vessels on a regular basis. As in all wars, there are times when the tides shift and the enemy goes on the offensive. Such was the case in October 1803, when the pirates captured the USS *Philadelphia*, which had gone aground while patrolling in Tripoli harbor. The pirates captured the ship, and her captain, William Bainbridge, along with all the officers and crew, was taken ashore and held hostage. The pirates then turned the guns of the frigate against the other U.S. ships. In February 1804, Navy lieutenant Stephen Decatur led a small contingent of eight U.S. Marines in a covert mission to attack the captured ship. Overpowering the guards the men set fire to the ship, denying its use as

OPPOSITE: Marine Raiders sport the two-piece "duck hunter" or "leopard spot" camouflage. The material was printed with a green pattern on one side and a brown one on the reverse side for jungle and beach operations, respectively. The Marines soon found the plain olive color to offer better concealment than either pattern. The latter uniforms were made of cotton herringbone twill in sage green. On the left breast pocket was the Eagle, Globe, and Anchor emblem with "USMC" stenciled above the symbol. NATIONAL ARCHIVES

First Lieutenant Presley O'Bannon led the first Marine attack on foreign soil during the Barbary Coast War. Travelling through the Libyan desert for six hundred miles allowed the Marines and their mercenary allies to take the city of Derna by surprise. Upon taking the harbor fort, O'Bannon ran the colors up the flagpole, and for the first time in history, the stars and stripes of the U.S. flag flew victoriously over foreign soil. USMC ARTWORK

a gun battery to the enemy. British vice admiral Horatio Nelson reportedly stated, "[the raid] was the most bold and daring act of the age."

During this same time, further acts of heroism occurred that would secure the Marines a place not only in military history, but also in the realm of unconventional warfare. On March 8, 1805, 1st Lt. Presley O'Bannon led the Marine detachment consisting of a sergeant and six privates in an unprecedented operation to attack the fortified Tripoli city of Derna and rescue *Philadelphia*'s crew. The Marines linked up with a diplomat turned Navy lieutenant, William Eaton, along with five hundred Greek, Arab, and Berber mercenaries. The coalition force began its mission in Alexandria, Egypt, and traversed six hundred miles of the Libyan desert to assure it the element of surprise.

On March 27 the force reached the city of Derna, where they proceeded to carry out a two-pronged attack; Eaton's force attacked the governor's castle, while O'Bannon led his Marines in a frontal assault on the harbor fort. Braving a hail of musket balls from the defenders, O'Bannon and his men managed to overrun the enemy positions, forcing them to leave with the fort's cannons primed and unfired. The Marines took control of one of the batteries and turned the guns upon the enemy. It was then when O'Bannon placed the American flag upon the ramparts of the fort. After two hours of hand-to-hand fighting, the stronghold was occupied, and for the first time in history, the flag of the United States flew over a fortress of the Old World. The Tripolitans attempted to counterattack the fort several times, yet each time they were repelled, sustaining heavy losses in the process.

The Marines' victory helped Hamet Caramanli, Yusuf's deposed brother, reclaim his rightful throne as ruler of Tripoli. In gratitude, he presented his Mameluke sword to Lieutenant O'Bannon. This famous sword became part of the officer uniform in 1825, and remains the oldest ceremonial weapon in use by U.S. forces today. Derna was the Marines' first battle on foreign soil. Lieutenant O'Bannon and his men are immortalized in the "Marines' Hymn": *"From the Halls of Montezuma to the shores of Tripoli, we fight our country's battles in the air, on land and sea."*

By the late 1890s, Spain had lost much of its power in the world, with the exception of Cuba and Puerto Rico in the Caribbean, and the Philippines and Guam in the Pacific. The sinking of the USS *Maine* in Havana Harbor, Cuba, on February 15, 1898, triggered the start of the Spanish-American War. The Marines, through their actions at Guantanamo Bay and Guam, proved that a small

Marine Raiders run through an obstacle course as they prepare to go to war. They are armed with an assortment of weapons, including the M1 Garand rifle, Thompson submachine gun, and Browning automatic rifle (BAR). USMC PHOTO

Marine Raiders practice beach assaults in a rubber raft. Note the Marine on the bow of the raft providing security with a Browning automatic rifle (BAR). USMC PHOTO

team of men could be rapidly deployed and successfully conduct amphibious operations. By August 12, hostilities had ceased. Though short in duration, the four-month war had transformed the United States into a major world power.

Throughout the late nineteenth century, though their numbers declined, the Marines did battle and protected American interests from Formosa and Korea to the Philippines and China, making use of their expertise in small-unit tactics against the enemy.

As the world entered the twentieth century, the Marines answered the call anew, projecting a U.S. sea-based power whenever the United States needed a rapid response force. The early years saw the Marines active in Central and South America, in what became known as the "Banana Wars."

Their experiences in Central America and the Caribbean led the Marines to begin systematically analyzing the nature and requirements of operations short of war proper or "small wars." Major Samuel M. Harrington of the Marine Corps Schools delivered a formal report, *The Strategy and Tactics of Small Wars*, in 1922. In addition, Major C. J. Miller wrote a 154-page report on the 2nd Marine Brigade's operations in the Dominican Republic titled *Diplomacy and Spurs in the Dominican Republic* in 1923. These and similar Marine publications were inspirational in the first publication of *Small Wars Operations* in 1935. The 1940 version was renamed the *Small Wars Manual*, and remains relevant today as the foundation of a good deal of current thinking and doctrine.

As the twentieth century progressed, the Marines handled an assortment of missions that, by today's standards, would be considered direct action (DA) operations. It would be during World War II, however, that the Corps would first create units specifically trained and equipped with the precise objective to carry out special operations.

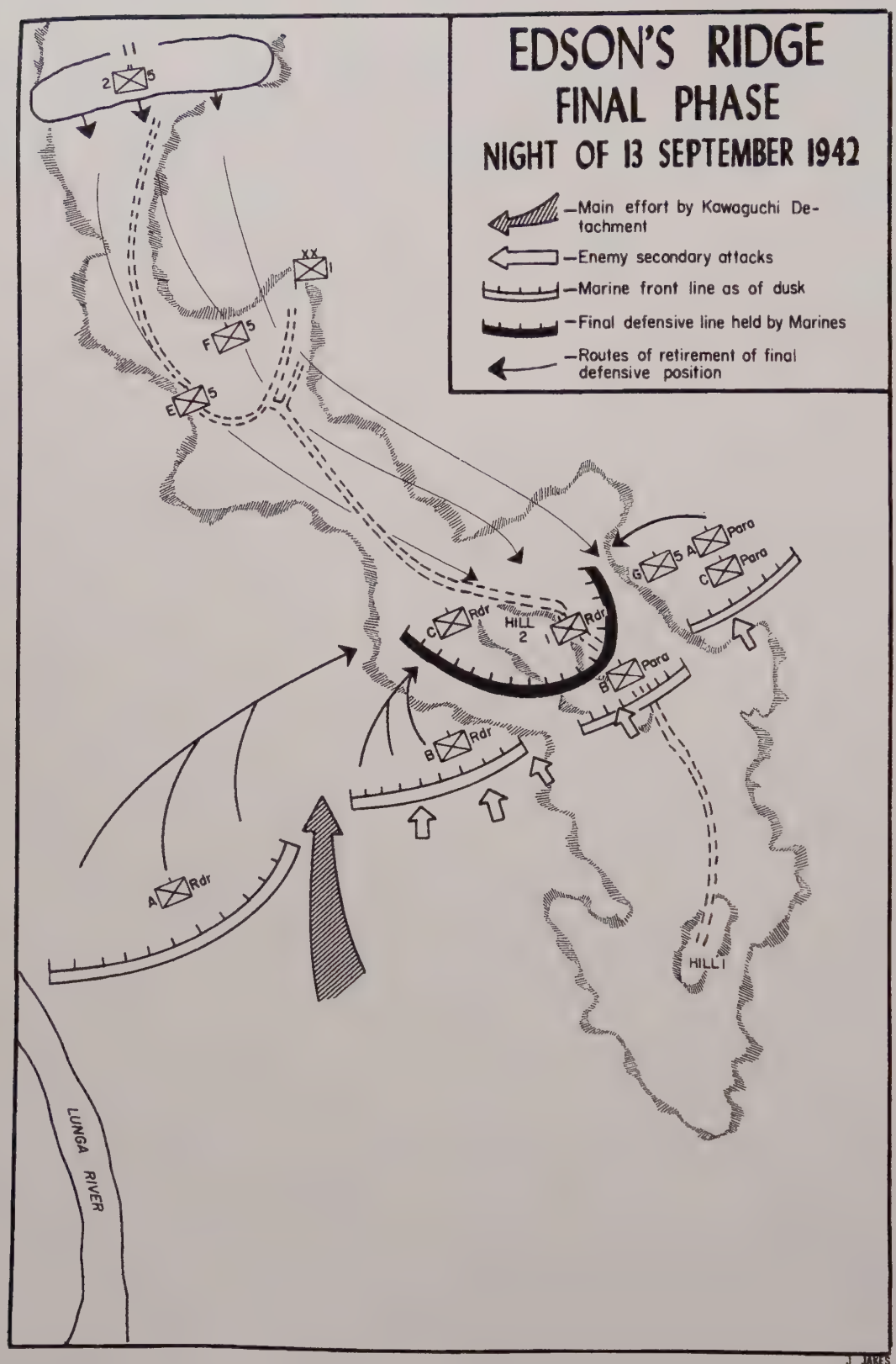
## MARINE RAIDERS

With the United States fully committed to World War II following the Japanese surprise attack on Pearl Harbor on December 7, 1941, President Franklin D. Roosevelt became interested in the creation of a unit on par with the British Commandos. After some deliberation by Maj. Gen. Thomas Holcomb, commandant of the Marine Corps, he selected the term "Raiders" and created two battalions. The 1st Raider Battalion was activated on February 16, 1942, followed by the 2nd Raider Battalion on February 19, 1942. Lieutenant Colonel Merritt "Red Mike" Edson would command the 1st Raider Battalion and Lt. Col. Evans Carlson commanded the 2nd, thus earning them the names Edson's Raiders and Carlson's Raiders, respectively. Two months later, on April 12, 1942, the Raiders were deployed from the United States en route to American Samoa.

The Marine Raider battalions were designed on similar parameters to today's special operations forces. Each consisted of lightly armed, intensely trained units established by the Marine Corps during World War II. This elite group of Marines would be tasked with three missions: spearhead larger amphibious landings on beaches thought to be inaccessible, conduct raids requiring surprise and high speed, and operate as guerrilla units for lengthy periods behind enemy lines. Having been given the directive from the president, the Raiders enjoyed wide latitude in the acquisitions of weapons and equipment. Whether it was part of the Corps standard issue or not, the Raiders got priority, no questions asked. This included manpower, as the battalions sought after and received the best of the Marine volunteers available.

Edson retained the traditional eight-man squad, made up of a squad leader, two Browning automatic rifle (BAR) men, four riflemen armed with M-1903 Springfield rifles, and a sniper. In contrast, Carlson departed from the norm, organizing his battalion into ten-man teams that included a squad leader and three fire teams of three Marines apiece. These Marines were armed with Thompson submachine guns, BARs, and M-1 semiautomatic rifles.

On August 7, 1942, in the first American offensive of World War II, the 1st Raider Battalion went ashore at Tulagi in the Solomon Islands. It would take three days of intense fighting before the Marines killed all of the Japanese on the island, where the enemy fought to the death. After three weeks, Edson's Raiders were relocated to Guadalcanal




USMC HISTORY DIVISION, QUANTICO

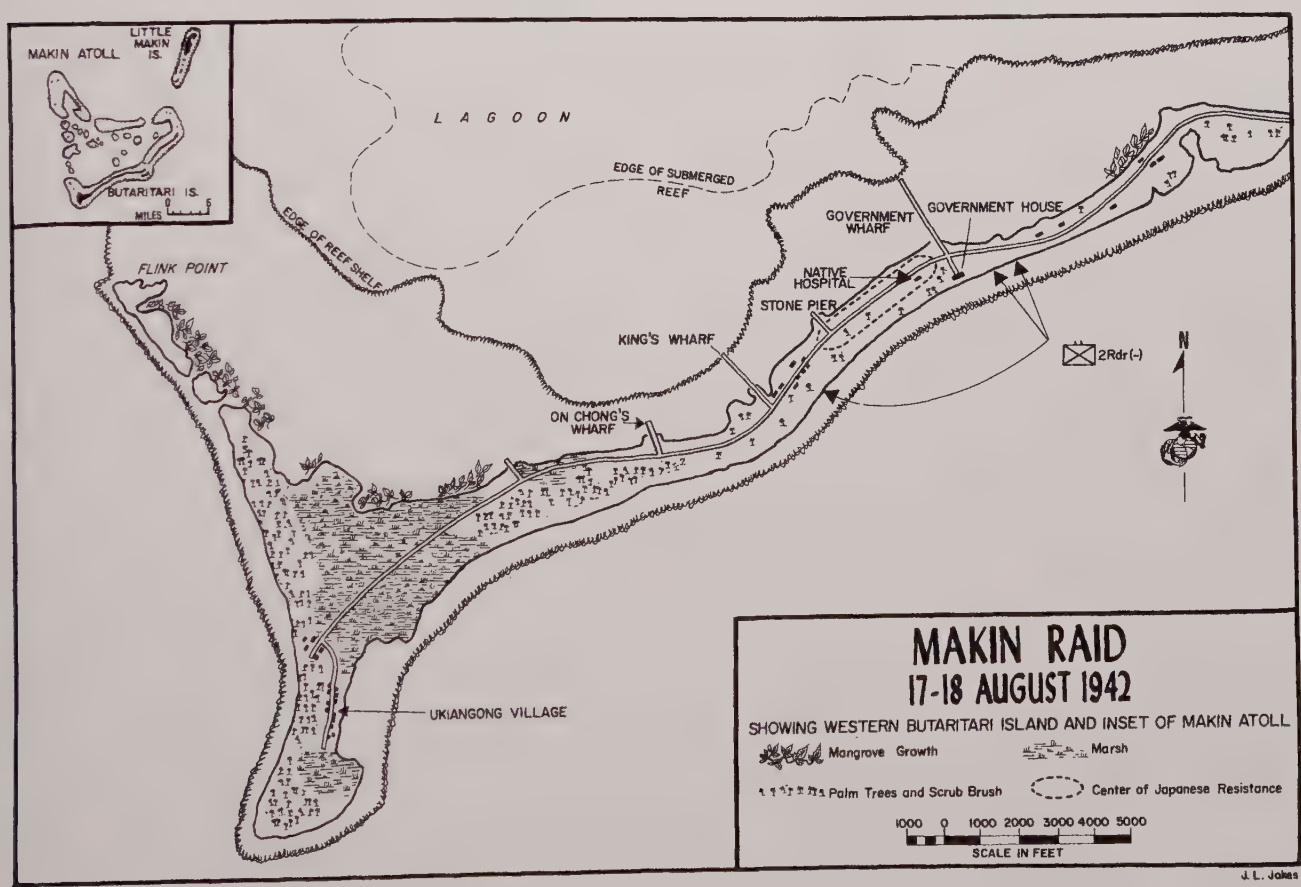
to assist the Marines there in the defense of Henderson Field. At this time, the Raiders continued seek-and-destroy missions against the enemy in a bold raid against approximately one thousand Japanese troops located in the village of Tasimboko. The surprise attack caught the Japanese soldiers off guard, forcing them to abandon their weapons, communications, supplies, and a unit of artillery, all of which the Marines destroyed.

Colonel Edson believed the Japanese forces that had fled during his attack at Tasimboko would attempt to strike Henderson Field. He received the 1st Marine Division's permission to occupy Lunga Ridge located south of Henderson Field in September 1942. The Raider Battalion was reinforced by two companies of the 1st Marine Parachute Battalion.

## Edson's Ridge

What was supposed to be a short rest for the Raiders would turn into a fight for their lives. On the evening of September 12, the Japanese unexpectedly attacked their position in an onslaught that included a naval bombardment by a cruiser and three destroyers. This heavy fire forced Edson's force to withdraw to a reserve location. At first light on September 13, Allied aircraft and Marine artillery rained down on the Japanese, forcing them to withdraw from the ridge. Expecting the enemy to attack again, Colonel Edson repositioned his men and instructed them to improve their positions on the ridge.

By this time the Marines were low on ammunition and supplies, but their spirits were high, having been motivated by Colonel Edson, who reportedly told them, "You men




USMC HISTORY DIVISION, QUANTICO

have done a great job, and I have just one more thing to ask of you. Hold out just one more night." And hold out they did, digging in and mustering up the courage, honor, and commitment to battle through the night. More than 2,500 Japanese soldiers repeatedly attacked Edson's Raiders and the Paramarines, whose numbers totaled only eight hundred. When the battle was done, the ground was strewn with the bodies of Japanese soldiers. Colonel Edson and the Marines continued to hold the high ground. The battle that ensued became known as "Bloody Ridge" and eventually as "Edson's Ridge," and has become one of the legendary accounts of courage and tenacity in which the U.S. Marines prevailed despite overwhelming odds during the Pacific Campaign.

## Makin Island Raid

On August 17, 1942, Lieutenant Colonel Carlson led the 2nd Raider Battalion on a raid against Japanese forces on Makin in the Central Pacific. The island was triangular in shape and covered in dense coconut palms from the waterline inland. The objective of the mission was to destroy the enemy installation on the island, capture prisoners, and gather intelligence on the Gilbert Island region. The raid was also intended to divert Japanese attention and reinforcements from the Allied landing on Guadalcanal and Tulagi.

The Raiders consisted of two rifle companies and a contingent of the battalion command group. Battalion headquarters, Company A, and eighteen men from Company B (totaling 121 Marines) were embarked aboard the submarine *Argonaut* (APS-1), and the remainder of B Company (totaling ninety Marines) was embarked aboard the submarine *Nautilus* (SS-168). The raiding force was designated Task Group 7.15.

Upon reaching their insertion point at 3:00 a.m., the submarines surfaced, and the Raiders were transferred to rubber rafts. Heavy swells created problems for the Marines as they transitioned from the subs to the rafts, as well as swamping the outboard motors. For these reasons, the original plan of landing the Marines on two separate beachheads was abandoned, and Colonel Carlson ordered the Raiders to follow him to the landing zone, code-named "Z." Fifteen of the eighteen rafts hit the beach along with Carlson, while two others landed approximately a mile north. The last of the rafts landed over a mile to the south, placing the Marines well behind Japanese lines.

Other than the environment obstacle, the Raiders landed unopposed by the occupying Japanese force. Colonel Carlson ordered Company A to head across the island and capture the lagoon road. By 6:00 a.m., the Marines had reached the Government Wharf and reported seizing the objective without enemy opposition. The smoothness of the raid suddenly ended, however, as 1st Platoon, Company A, made contact with enemy forces and met heavy resistance. The Japanese infantry was armed with four machine guns, a flamethrower, grenade launchers, and automatic weapons, as well as snipers. The battle raged on for more than five hours, until another platoon from Company A broke through and flanked the enemy positions.

While Marines had been fighting, a Japanese transport ship and patrol boat had entered into the lagoon. These two ships would never pose a threat to the Raiders, however, as both enemy vessels were sunk by the deck guns of the American submarines on station. Two hours later a flight of twelve Japanese aircraft arrived, consisting of two Kawanishi H6K flying boats, four Nakajima A6M2-N fighters (Zeroes), four Kawanishi E7K2 Type 94 reconnaissance bombers, and two Nakajima E8N2 Type 95 recon planes. The flying boats landed to deliver reinforcing troops, only to be destroyed by gunfire from the Raiders. The other enemy planes flew over the island for more than an hour, sporadically dropping bombs and making strafing runs but failing to kill any Marines.

At 7:30 p.m., as scheduled, the Raiders began their withdrawal from the island, using the same eighteen rafts on which they had come. Though the Marines had practiced surf passages and raft operations extensively, the heavy sea conditions washed many of the rafts back to shore. Only seven of the rafts made it back to the submarines; the balance of the Raiders remained on the island. On the morning of August 18, the submariners dispatched a rescue raft to deploy a rope that would allow the Marines to be pulled out through the rough surf. However, a group of Japanese aircraft arrived and began attacking the waterborne Americans, forcing the submarines to crash-dive and remain submerged for the balance of the day.

The Raiders were able to get a signal to the submarine and arrange a new rendezvous for 11:00 p.m. at the entrance of Makin Lagoon. The Marines did what Marines still do today: they adapt, improvise, and overcome. Using their four remaining rafts and two native outriggers, the Raiders headed out to sea at 8:30 p.m., arriving alongside the *Nautilus* at 11:08 p.m., just off the entrance to the lagoon, Flink Point. Seventeen of the Raiders were wounded and thirty-one others remained unaccounted for. It was later learned that nine of them were still alive on the island after the last evacuation, were captured by the Japanese and transported to Kwajalein in the Marshall Islands. There, Rear Admiral Koso Abe, commander of the 6th Base Force, ordered them beheaded.

Although the Raiders accomplished their mission of decimating the Japanese garrison on Makin Island—Japanese dead were estimated at anywhere between 83 and 160—the overall evaluation was that it had failed to meet the strategic goals of the operation. No enemy prisoners had been taken, and no workable intelligence collected. The raid did prove useful, however, in testing the Raiders' tactics, techniques, and procedures.

Two additional Raider battalions would be created and serve operationally in the Pacific theater of operations. The Raiders would participate in twenty major campaigns and battles in the course of the war, bringing their fighting spirit and discipline to every engagement. Some Marines viewed the Raiders as an "elite within an elite," which lead to some resentment in the Corps. As such, the majority of operations conducted by the Marine Raiders were seen as tactics that should be employed to all Marine infantry, and all of the Corps should be trained to carry out the same tactics. By February 1944, the Marine Raider battalions had been disbanded.

A Paramarine armed with an M1911 .45-caliber pistol and Reising submachine gun. An air-cooled, delayed blowback, shoulder-fired weapon, the Reising weighed 6.5 pounds and had a maximum effective range of 300 yards. It was chambered for .45-caliber ACP ammunition in either a twelve- or twenty-round magazine, and had a muzzle velocity of 900 feet per second with a cyclic rate of 450 rounds per minute. Unique to the Marine Corps, the Reising was deemed problematic, and by the spring of 1943, the Marines replaced it with the Thompson SMG or M1 carbine. COURTESY OF JOE PAGAC

## Paramarines

In May 1940 the commandant of the Marine Corps, General Holcomb, ordered plans for the creation of a Marine unit capable of deploying via parachute. This unit would consist of one battalion of infantry and a platoon of artillery consisting of two 75mm pack howitzers. The plan outlined three tactical mission parameters under which the Marines would be deployed: First, as a reconnaissance

and raiding force that would operate under the assumption that it would potentially be unable to return to Allied lines. Second, the paratroopers could be deployed as a spearhead or vanguard to capture and hold strategic positions or terrain until relieved by larger follow-on forces. Third, the unit could act as an independent force functioning in a guerrilla warfare role behind enemy lines.

On October 26, 1940, the first group of two officers and thirty-eight enlisted men were sent to the Naval Air Station in Lakehurst, New Jersey. Here these forty Marines would begin their training, learning how to jump out of an airplane. Whether the motivation was patriotism or the lure of the extra jump pay—fifty dollars per month for enlisted and a hundred dollars per month for officers—there was no shortage of volunteers. Marines trying for a slot in the parachute skill were required to be between eighteen and twenty-two years old, single, athletic, and intelligent, with no physical or mental impairments.

The tempo of Marine training was beginning to feel the demands of the war effort. For this reason the secretary of the Navy, William Franklin Knox, approved the Marine commandant's request to establish two Marine parachute schools. In May 1942 the Parachute School was created in San Diego, and in June the Parachute School opened at New River, North Carolina.

The 1st Parachute Battalion officially formed at Quantico on August 15, 1941, under the command of Capt. Marcellus Howard, and on July 23, 1941, the 2nd Parachute Battalion was organized at San Diego under the command of Capt. Charles Shepard Jr. The 3rd Battalion was formed on September 16, 1942, under the command of Maj. Robert Vance, and the 4th Parachute Battalion entered on April 2, 1943.

The 1st Parachute Battalion was attached to the 1st Raider Battalion, along with the 2nd Battalion/5th Marines, which made up the Marine forces landing on Guadalcanal. The 1st Parachute Battalion, which had suffered heavy casualties in the Battle of Tulagi and nearby Gavutu-Tanambogo in August, was placed under Colonel Edson's command. The 2nd Parachute Battalion would be tasked with a diversionary raid on Choiseul Island in October 1943, and later joined the 1st and 3rd Parachute Battalions on Bougainville.

In retrospect the tactical advantage of airborne troops cannot be discounted in either a full-scale war or low-intensity conflict. Nevertheless, the Paramarines were considered a luxury item the Marine Corps could neither fund or support logistically at that time in history. On February 29, 1944, the 1st Marine Parachute Regiment was disbanded.

## Office of Strategic Services (OSS)

When one mentions the OSS, the average person may think of the historical link to the U.S. Army and Special Forces, which evolved from the Jedburgh teams and operations groups. The OSS, which was the forerunner of today's Central Intelligence Agency (CIA), ran clandestine missions in both the European and Pacific theaters of operations. It was instrumental in gathering intelligence, conducting sabotage raids in occupied Europe, and working with French resistance fighting against the Nazis.

What may be surprising to some is that Marines were also active in this covert unit during the war. Assigned to the OSS was Marine lieutenant colonel William Eddy, who worked with the counterintelligence (CI) branch within the Office of Naval Intelligence prior to the outbreak of World War II. The head of the OSS, Army colonel William "Wild Bill" Donovan, assigned Eddy to head all undercover and subversive operations in French North Africa. Eddy coordinated efforts between the OSS, Special Operations Executive (British sabotage and subversion agency), and the British Secret Intelligence Service (SIS) for the Allied landings called Operation Torch. Starting on November 8, 1942, Torch would be the first military action in which the OSS provided direct support.

Another Leatherneck to operate with the OSS was Col. Peter Ortiz, then a captain, who served in both Europe and Africa. Ortiz was born in New York City on July 5, 1913, but was schooled in France, where he left prior to his graduation in order to join the French Foreign Legion. He was wounded in action and captured by the Germans, but after fifteen months as a prisoner of war (POW), he managed to escape in October 1941. Making his way back to America, he joined the Marines on June 22, 1942, and was trained at Paris Island. In May 1943 he was attached to the OSS.

Having lived in France, Ortiz was fluent in that language as well as five others; he was also a graduate of the Marine

Sixteen members of a reconnaissance company attached to the 1st Marine Division in Korea reveal their position. USMC HISTORY DIVISION, QUANTICO

A Scout patrol of the Marine Amphibious Reconnaissance Company departs in rubber boats from the submarine USS *Perch* during Operation Ski Jump, January 1957. USMC HISTORY DIVISION, QUANTICO

parachute school. On January 6, 1944, he parachuted into France to assist the underground resistance forces known as the Maquis. While working with the Maquis, he also assisted in the rescue of four Royal Air Force pilots who had been shot down. In 1944, Ortiz was recaptured by the Germans and spent the remainder of the war as a POW.

## Amphibious Reconnaissance Company

On January 7, 1943, the Observer Group, which had been created in 1942, was redesignated the Amphibious Reconnaissance Company under the command of Capt. James L. Jones. In the summer of 1943, the Amphibious Corps would be reorganized, and the ARC would become V Amphibious Corps, or VAC Amphib Recon Company. During operations on Apamama, Majuro, and Eniwetok, VAC Amphib Recon Company was assigned to pinpoint the location of the enemy throughout the atolls. The VAC Amphib Recon Battalion underwent further evolution on April 14, 1944, when it became the Amphibious Reconnaissance Battalion with a complement of twenty officers, two hundred seventy enlisted Marines, and thirteen Navy corpsmen. Worth noting is that at the same time, Marines were attached to the "coast watcher" units, and recon teams from "Special Service Unit Number 1" served the forces in the Southwest Pacific.

A pivotal moment for the Reconnaissance Marines would come in July 1944 when Marine Lt. Gen. Holland Smith and Vice Adm. Kelly Turner disagreed on the

Members of the 1st Marine Division's Reconnaissance Company review the results of a night patrol in Korea. Examining a map are, left to right, Capt. James H. A. Flood, Sgt. Richard P. Antekeier, and Hospital Corpsman 1st Class Ernest A. Colburn. USMC HISTORY DIVISION, QUANTICO

A parachute scout, foreground, makes a sketch of enemy terrain and installations while another Marine Corps scout covers him with an M3 "grease gun." All reconnaissance Leathernecks are experts in determining terrain factors and the capabilities of roads and bridges. These Marines are from the 1st Marine Division, Camp Pendleton, California. USMC HISTORY DIVISION, QUANTICO

proposed landing sites for the assault on Tinian Island. Armed with only Ka-Bar knives, the Marines of the Amphibious Reconnaissance Company, VAC, were tasked with surveying two beaches that Smith had chosen as possible locations for the landing.

Brigadier General Russell Corey (Ret.) relates: "There were two landings sites, White 2 and White 1. The beaches were about sixty yards and one hundred sixty yards respectively. [Corey] and Gunny Charles Patrick (Major, Ret.) led the two recon teams. The first night the current was so strong we could only conduct the recon on one of the beaches. The next night we returned and were able to do both landing sites."

Based on VAC's findings, the site choice went to General Smith, and beaches White 1 and White 2 were chosen for the landing of two Marine divisions on Tinian. General Corey adds: "Had the division gone ashore on the spot picked by Kelley, it would have been a slaughter. The Japs had gun emplacements and artillery all lined up in the Tinian Town location." The Recon Marines had earned their pay and would see subsequent use in Iwo Jima and Okinawa, as well as other amphibious assaults in the Pacific.

## BIRTH OF FORCE RECON

Force Reconnaissance, as it is known today, was activated on June 19, 1957, with the creation of 1st Amphibious Reconnaissance Company, FMFPAC (Fleet Marine Force, Pacific), under the command of Maj. Bruce F. Meyers. Located out of Camp Pendleton, California, this newly organized company would be formed into three platoons: an amphibious reconnaissance platoon,

Clad in a rubber exposure suit, a Marine scout swimmer dives from an inflatable boat more than five hundred yards offshore. The exposure suit is worn in cold climates where water temperatures hamper swimmers. Working in teams of two, the scout swimmers examine the beach for obstacles and enemy patrols. If the area is clear, they signal the remainder of the reconnaissance patrol to come ashore. USMC HISTORY DIVISION, QUANTICO

A patrol from B Company, 3rd Recon, 3rd Marine Division, searches an area just below the Vietnamese Demilitarized Zone (DMZ), January 1969. USMC HISTORY DIVISION, QUANTICO

Cpl. John L. Borst and Staff Sgt. David D. Woodward, both with the 3rd Force Reconnaissance, call on the radio for a gunship to hit the area ahead of them while on patrol "touchdown" near the DMZ and the Laotian border, February 1967. USMC HISTORY DIVISION, QUANTICO

a parachute reconnaissance platoon, and a pathfinder reconnaissance platoon. Subsequently, in 1958, half of the company was transferred from Camp Pendleton to Camp Lejeune, to form the 2nd Force Reconnaissance Company, FMFLANT, (Fleet Marine Force, Atlantic), under the command of Capt. Joe Taylor, and thus supported the 2nd Marine Division. Worth noting is the fact that it would be another four years before the Navy SEALs would come on the scene, and another eleven years before the Army would designate a counterpart to Force Recon with the creation of LRRPs (long-range recon patrols).

As the country progressed into a new decade, the Marines of Force Recon also advanced in their tactics, techniques, and procedures. These men, proficient in land navigations, small arms tactics, and patrolling, as well as having earned their wings, would now depart from terra firma to master the skills of attacking from the sea. Fast boats, rubber rafts, and submarines were not new to the Marines, who had used these craft as platforms during World War II and Korea. Methods of locking-in and –out of submarines and buoyant ascents all would serve the Force Recon Marines in performing their missions. While the men were honing their skills, the United States was becoming increasingly involved in the guerrilla war in the Republic of Vietnam. That conflict would prove to be a watershed for Marine Force Reconnaissance.

Sergeant Ron Hillard from Birmingham, Alabama, looks out the porthole of a CH-46 helicopter as he waits for his team to be inserted, May 1970. USMC HISTORY DIVISION, QUANTICO

## The Vietnam War

Members of 1st Force Reconnaissance Company were deployed to Vietnam in 1965, while 2nd Force had the assignment of training new Recon Marines to be sent to Southeast Asia. The Force Recon Marines at Lejeune would also serve as the primary unit should any other contingency arise elsewhere that required the attention of the Marine Corps. Sensing the need for additional reconnaissance capabilities in country, the Corps formed 3rd Force Company, per Lt. Col. Bill Floyd (Ret.): "We took the company over in September of 1965. First would make their home in Dong Ha, while 3rd was in Quang Tri." When the Marines of Force Recon first deployed to Vietnam they were armed only with M3A1 "grease guns"; subsequently they would reequip with the M-14 and eventually with the M16 assault rifle.

Marines are taught to fight, to give no quarter, and to defeat the enemy at all costs. Conversely, reconnaissance work required stealth and patience, at times letting the enemy pass by so the team could report on their movements. The aggressiveness of the U.S. Marine was something that had to be "un-learned" in order for reconnaissance to be successful. To enhance these new skills of Force Reconnaissance companies, many of the Marines attended Recondo School taught by members of the U.S. Army 5th Special Forces Group (Airborne).

## Force Recon and Battalion Recon Post Vietnam

Worth noting is that within the Marine Air-Ground Task Force there are two reconnaissance units: one of these is Force Reconnaissance Company, while the other is the Battalion Recon (sometimes referred to as Division Recon) platoon, which is under the commander of the combat element. The Force Recon Company works directly for the MEF commanding general, normally a three-star, or directly for the MEU (SOC) commander, providing tactical and strategic reconnaissance and limited scale raids (e.g., GOPLAT, VBSS, demolition raids, etc.) in the deep battlespace. Force Recon covers the commander's area of *interest*: the edge of the artillery fan and beyond. The Battalion Recon covers the commander's area of *influence*: within the artillery fan (approximately thirty kilometers from the forward line of troops).

The Force Reconnaissance Company will conduct operational-level reconnaissance in the deep battle areas. Conversely, Battalion Recon Marines are trained to operate just forward of the front lines, or directly in front of or alongside of the conventional Marine units. Not all Battalion Recon Marines are airborne and/or scuba qualified. While the training paths are similar for the Recon Marines, those assigned to Force Reconnaissance companies will receive more advanced skills and training, which more than match those of the special operations forces of SOCOM. This skill set allows the Force Recon Marines to excel in the area of deep reconnaissance and DA missions, well beyond the range of the Battalion Recon assets. The special skills of these Marines, from Lt. Presley O'Bannon to the Marines of today, create a tight link between those historical units and the Marines of MARSOC.

Armed with an M4A1 carbine, a Marine provides security for his team as the platoon leader calls in a SitRep. The 4th Force Reconnaissance Company is located at the Marine Corps Base, Kaneohe Bay, Hawaii.

CHAPTER 3

# MARSOC CREATION AND ORGANIZATION

IN 1992, THE SOCOM/USMC board was established in an attempt to formalize the joint efforts of SOCOM and the Marine Corps; it was terminated four years later. After al Qaeda's murderous airliner hijackings and suicide attacks on the World Trade Center and the Pentagon on September 11, 2001, the U.S. military machine went into overdrive. Operational Tempo, or OPTEMP, would go through the roof, especially among special operations forces. While it is the soldier who prays most for peace, this was the war for which SOCOM units had been trained, equipped, and prepared to fight. SOCOM units from Tier-1 (i.e., Delta Force) to support elements were "jocked up" and poised for *their* rendezvous with destiny. This was the Super Bowl of missions for the special operations community, and each operator was primed and ready to answer the call of the commander in chief, to "bring the enemy to justice, or justice to the enemy."

The global war on terrorism (GWOT) resulted in the largest deployment of special operations forces since the Vietnam War. Although the Marine Corps did not have any troops under SOCOM, it did have the MEU (SOC), and organic to the force were the Force Recon Marines. These Marines received the same training as the SOCOM units and, without doubt, were on par with most, and head and shoulders above some of those in the SOF community. Force Recon Marines were so highly regarded for their special operations skills that it is said that Delta Force assets aboard the USS *Kitty Hawk* during Operation Enduring Freedom wanted Marine Force Recon teams to conduct their preassault reconnaissance.

It soon became apparent that SOCOM had to increase both in capability and capacity in order to meet and prosecute the demands of the GWOT. In November 2001, Commandant Gen. James L. Jones and the commander of SOCOM, Air Force general Charles R. Holland, revived the SOCOM/Marine board. The intent was to move the Marine Corps and SOCOM closer together and establish a framework for building bridges between the two organizations. A year later, in December 2002, Marine Corps Bulletin 5400 called for a "proof-of-concept" operation for a Marine Corps contribution to SOCOM. The test period would last for two years, beginning in 2004; preparation and training, however, had already commenced in 2003.

A memorandum of agreement (MOA) between SOCOM and the Marine Corps was signed off in February 2003 by Lt. Gen. Bryan D. Brown, U.S. Army, deputy commander, SOCOM, and Lt. Gen. Emil R. "Buck" Bedard, deputy commandant for plans, policies, and operations (PP&O), USMC. The agreement set up the parameters for the proof-of-concept period for the Marine Corps' participation in SOCOM.

OPPOSITE: U.S. Marines provide security in a wheat field in Suji as Afghan soldiers and Marines patrol through the village in the Bala Baluk district in Afghanistan's Farah province on March 29, 2010. The Marines are assigned to Marine Special Operations Command. USAF PHOTO, STAFF SGT. NICHOLAS PILCH

ABOVE: Detachment One headquarters at Camp Del Mar Boat Basin, Camp Pendleton, California. Marine Corps Special Operations Command Detachment One (MCSOCOM Detachment One or Det 1) was a proof-of-concept program to assess the feasibility of Marine Special Operations Forces being permanently detached to the United States Special Operations Command (SOCOM). It was commanded by Col. Robert J. Coates, former commanding officer of 1st Force Reconnaissance Company.

LEFT: Created by Warrant Officer (then Gunnery Sgt.) Anthony Siciliano, Det One's insignia comes from the World War II Marine Raider's patch, a blue patch with a skull and stars. The scarlet, blue-and-gold disk represents the unit's joint Navy-Marine Corps origins. The crossed stiletto/lightning bolt represents the unit's special operations mission and its global communications reach. The parachute wings represent airborne qualified status, and the mask above it represents the combat diver qualification. USMC ARTWORK

A pair of Marines from the Intel section of Det One prepare for a patrol. Both Marines are armed with the Colt M4A1 carbine, with an assortment of COTS and issued add-ons. The Marine on the left has kept his carbine black, while his teammate has painted his weapon in a desert camouflage pattern. Both are carrying M1911 pistols in a Safariland Model 6004 tactical holster. Adding to the "cool" factor are the sunglasses, a.k.a. "tactical eye protection." MARSOC/DET ONE PHOTO

The official name of the test unit was USMC/USSOCOM Detachment (MCSOCOM Det). The detachment would work with a deployed naval special warfare (NSW) squadron to augment the squadron's capabilities in special reconnaissance, direct action, and other missions. It would be under the operational control of an NSW commander while attached to the NSW squadron. In addition to a headquarters section, MCSOCOM Det would have sections specializing in reconnaissance, intelligence, and fire support. The section personnel would work together in teams organized to fit the demands of specific missions. The MOA emphasized that detachment integrity should be maintained to the greatest possible degree, although it allowed for the NSW squadron commander to use small teams of Marine detachment personnel with his other squadron assets if the mission required it. And—very important when it comes to the battles of the budgets—the Marine Corps would bear all personnel, equipment, facilities, training, deployment, and operational expenses required to support the detachment.

Out of the above MOA came the T/O (table of organization) for Marine Corps Special Operations Command Detachment One (MCSOCOM Detachment One or Det 1), officially activated at Camp Pendleton, California, on June 20, 2003. The unit was commanded by Col. Robert J. Coates, former commanding officer of both the 1st Force Recon Company and Marine Special Operations Training Group (SOTG), located at Camp Pendleton. Det One was headquartered at Camp Del Mar Boat Basin, located in Camp Pendleton.

A member of Det One waits to move out on a night patrol in Iraq in support of Operation Iraqi Freedom. Det One Marines had wide latitude in modifying their weapons with COTS equipment. This Marine has replaced the standard Colt furniture on his M4A1 with a Magpul M93 modular stock system, as well as an Ergo brand pistol grip. Atop the carbine is an Aimpoint 'red dot' sight, AN/PEQ-2, and Surefire flashlight. MARSOC/DET ONE PHOTO

## ORGANIZATIONAL STRUCTURE OF MCSOCOM DETACHMENT ONE

Each MCSOCOM detachment consisted of eighty-one Marines and five Navy corpsmen divided among four sections: a reconnaissance element (thirty men); intelligence element (twenty-nine men) containing a headquarters element and a radio recon team (RRT) (nine men), a human intelligence (HUMINT) exploitation team (HET) (six men), and all-source fusion team (twelve men), which assembled information from various sources, then analyzed and distributed it to all who needed it; a fire support unit (seven men) composed of three ANGLICO (air-naval gunfire liaison company) Marines, three radio operators, and a forward air controller, led by a field artillery major; and a headquarters element.

Det One was designed to operate as an independent organization commanded by a colonel (O-6) with a major (O-4) as the deputy. The headquarters element consisted of staff sections representing operations, logistics, communications, etc. Once deployed, because of the previously agreed upon command arrangements, the Det

One commander was detached from the detachment and attached to 1 MEF to conduct liaison and coordination with conventional Marine Corps operations, while the deputy assumed command of Det One. Designated officers and NCOs from the detachment were then integrated with the leadership of the Naval Special Warfare Task Group that they were co-deployed with. The recon element was led by a captain (O-4) who had been an infantry platoon commander with reconnaissance background. The platoon sergeant of the recon element was a master sergeant (E-8) with extensive reconnaissance background. The recon element included four five-man teams.

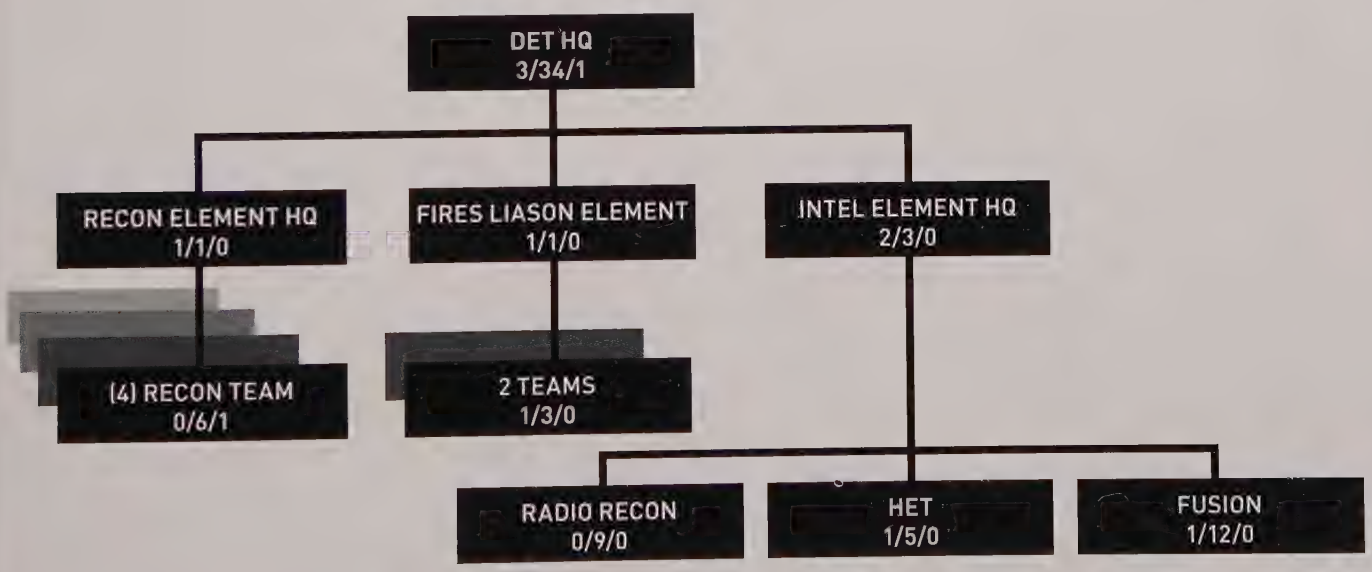
Colonel Robert J. Coates, the detachment's founding commander, related, "The task for the day was training, training and training." And train they did. Within eight months the detachment went from scratch to a combat unit ready to deploy to war. Colonel Coates's requirements were straightforward. "The operator needed hard feet, a strong back and [to] be a gun fighter." The average age of a Marine in Det One was thirty-six to forty-one.

From April through October 2004, Det One would be deployed to Iraq in support of Operation Iraqi Freedom. The Marines operated as Special Operations Task Unit Raider under the control of the Combined Joint Special Operations Task Force Arabian Peninsula (CJSOTF-AP). The detachment operated with Naval Special Warfare Group One to execute direct action, coalition support, and battlefield-shaping operations.

The proof of concept for Det One posed several questions and criteria for the Marines' future within SOCOM as the queries included: Can a Det One operate effectively as a stand-alone special operations force (SOF) component under a Joint Special Operations Task Force (JSOTF)? What SOF core tasks can Det One accomplish? Can Det One perform effectively in the full spectrum of operational environments?

A proof-of-concept deployment evaluation of Det One's actions during Operation Iraqi Freedom prepared by the Joint Special Operations University at Hurlburt Field, Florida, states: ***"Employment in OIF was limited to DA,***

Marine Corps Detachment Task Organization in Iraq
TU Raider ISO NSWTG-AP



*SR and support to Special Activities. This limited scope of employment was based on requirements and priorities of CJSOTF-AP and NSWTG-AP commanders in OIF. Thus it was an externally imposed constraint that precluded the MCSOCOM Det from executing other core tasks. Based on the operational effectiveness demonstrated by the detachment in the assigned tasks, it is reasonable to suggest that given similar preparation, the Det could satisfactorily conduct or support other core tasks.*

*"The MCSOCOM Det demonstrated they could effectively conduct Direct Action (DA) and Special Reconnaissance (SR) in conjunction with a Naval Special Warfare Task Group. Given the personnel qualifications, training and equipment, of the Detachment it is reasonable to suggest they could also conduct or support Foreign Internal Defense (FID), Counter Terrorism (CT), Special Activities, Support to selected Theater Security Cooperation Plans (TSCP), and other tasks as required.*

*"The MCSOCOM Det conducted 23 Direct Actions (DA) Raids. The raids can be characterized as well planned and executed and complex in nature. All but one of the raids were conducted with support from one or more fires platforms and at least one other CSOTF-AP ground force. 85% of the targets raided yielded detainees or contraband, and one out of every 12 detainees were HVTs. Of note, 9 insurgent cell leaders were detained or killed (1 was killed), and 7 Improvised Explosive Device cells were disrupted. Research and analysis strongly indicate the initial force contribution was an overall success and that a Marine Corps force contribution has the potential to support USSOCOM requirements."*

With the global war on terrorism drawing more and more on special operations forces, the decision was made to officially incorporate a Marine Corps special operations force element into SOCOM. In an announcement by Secretary of Defense Donald Rumsfeld on November 1, 2005, he approved a joint recommendation by SOCOM and the Marine Corps to add Marine Corps special operations forces to SOCOM. Det One had proven its worth; this was the birth of MARSOC. The Marine Corps now joined America's other armed forces as a full-fledged member of the special ops community.

During a press conference, Rumsfeld stated: "In this complex and unconventional conflict, we are constantly looking for ways to strengthen our armed forces. For a number of years, the chairman [of the joint chiefs] and I and others have been working on plans to further improve the special forces. One of the results of those studies is that I've just approved the creation of a Marine Corps component in the U.S. Special Operations Command, which will increase the number of Special Operations forces available for missions worldwide while expanding their capabilities in some key areas."

In October 2005, the Foreign Military Training Unit (FMTU) was activated under the 4th Marine Expeditionary Brigade (Antiterrorism). The mission of the FMTU was to train in combat advisor techniques, language and culture, and mission-specific skill sets, depending on the requirements of the host nation. FMTU Marines are also required to be duty experts in infantry skills, combat medicine, and advanced communications, because they are often working in small teams independent from friendly forces, and in some cases may be the only U.S. military forces in a foreign country. In May 2007, FMTU was changed to the Marine Special Operations Advisory Group (MSOAG) and deployed to Afghanistan in support of Operation Enduring Freedom. On August 27, 2009, MSOAG was redesignated as the Marine Special Operations Regiment (MSOR). On March 10, 2006, Det One was deactivated and succeeded by MARSOC.

## MARSOC

On February 24, 2006, the Marine Corps officially joined the special operations community with the creation of MARSOC. MARSOC became a major command within the Corps and SOCOM. At the activation ceremony of this important milestone in the history of the Corps, Secretary of Defense Rumsfeld stated, "It pairs two of history's most dedicated groups of warriors—the men and women of the U.S. Special Operations Command and the United States Marine Corps. Special operations forces and U.S. Marines are legendary for their agility, creativity and willingness to take on difficult missions,

Assuming command of the Marine Special Operations Command on February 24, 2006, Brig. Gen. Dennis J. Hejlik was a former enlisted Marine who had been discharged as a sergeant in 1972 and commissioned through the Platoon Leaders Class Program. He is a graduate of the Amphibious Warfare School, the Command and Staff College, and the Naval War College. USMC PHOTO

and the Marines have played important roles in past U.S. victories. Today in the global war on terror, we call on Marines again . . . to seek new and innovative ways to take the fight to the enemy. Our country needs agile, highly mobile forces to track down terrorist cells that are dispersed across the globe."

The backbone of MARSOC came from the 4th Marine Expeditionary Brigade (Antiterrorism) headquarters. Additionally, the FMTU and several Force Reconnaissance platoons were reassigned to create the new Marine special operations companies (MSOC). In 2010, the Marine commandant, Gen. James Conway, commented, "We had to pay the upfront price of becoming involved in true special operations type of capabilities, 2500 of some of our absolute best Marines, and we want to sustain that over time." As of February 28, 2010, there were 1,965 Marines, 180 sailors, and 124 civilians assigned to MARSOC, a total of 2,269 personnel.

According to Maj. Jeff Landis, MARSOC PAO: *"MARSOC's role within SOCOM has expanded in that MARSOC is better able to assist SOCOM in stabilizing fragile governments so that they can defend their sovereignty, not only territorially, but economically and culturally as well. MARSOC does this by maintaining an enduring 1-SOTF [special operations task force] and 2-MSOC [Marine special operations company] presence while still allowing the command the flexibility to support additional SOCOM requirements as they arise. In our ongoing efforts to build a command with long-term relevancy that USSOCOM can employ across the spectrum of SOF engagement methods, the top priority remains in selecting and training Marines into regional experts who can operate in an area and work by, with, and through the native population. We must continue to develop our Marines and sailors [who] will eventually be capable of conducting missions that can help shape the long-term strategic environment.*

*"The decision to create a MARSOC comes after several years of considerable effort on the part of SOCOM, the Marine Corps and the Pentagon to build a Marine contribution to a community that has been heavily used since the war on terrorism began. In our ongoing efforts to build a command with long-term relevancy that USSOCOM can employ across the spectrum of SOF engagement methods, MARSOC's top priority is to select and train Marines who will eventually be capable of conducting missions that can help shape the long-term strategic environment using capabilities to separate reconcilables from irreconcilables. MARSOC brings the Marine Air-Ground Task Force (MAGTF) mentality to SOF.*

*"The Marine Corps is inherently expeditionary in nature and regularly organizes its units so that they have the ability to work in austere environments with very little reach back requirement. MARSOC incorporates fused intelligence capabilities, combat support (CS), and combat service support (CSS) directly into our units at the lowest level so that they are specifically task-organized and self-sustaining. We simply took the MAGTF mindset inherent in the Marine Corps, compressed it into a smaller team, and trained and equipped that team exclusively and specifically for special operations missions. The Global War on Terror has dramatically expanded our requirement for SOF. MARSOC has created a new group of mature, experienced, and combat-tested men who add both special operations capacity and capability—a strong positive step in protecting our way of life."*

The official emblem of the United States Marine Forces Special Operations Command.

## MARINE SPECIAL OPERATIONS REGIMENT

The MSOR, located at Camp Lejeune, North Carolina, is made up of three Marine special operations battalions and a headquarters company. According to the operations officer for the MSOR, the changes were made to create three battalions, each with equal capabilities in direct action, special reconnaissance, and foreign internal defense. The regiment has absorbed the tasks of the Marine Special Operation Advisory Group (MSOAG), formally the FMTU. Marines provide specific military training and advisory support to foreign forces, which in turn organize and enhance those countries' tactical capabilities to perform in Joint Special Operations Task Force as directed by SOCOM. The Marines and sailors of the regiment advise, train, and assist the forces of friendly host nations.

These foreign internal defense (FID) activities constitute one of the core missions of SOCOM. The FID missions enable the host nation's maritime, naval, and paramilitary forces to support their government's internal security, and to counter the threats of subversion and insurgency, both internal and external.

The benefits of a FID mission can be manifold: first, you have developed a new ally; second, should the need arise to deploy SOCOM units into the region, the host nation is already trained in similar combat tactics; and third, if the host nation can provide its own security in combating any threat, it would curtail the need to commit massive amounts of U.S. forces into the region.

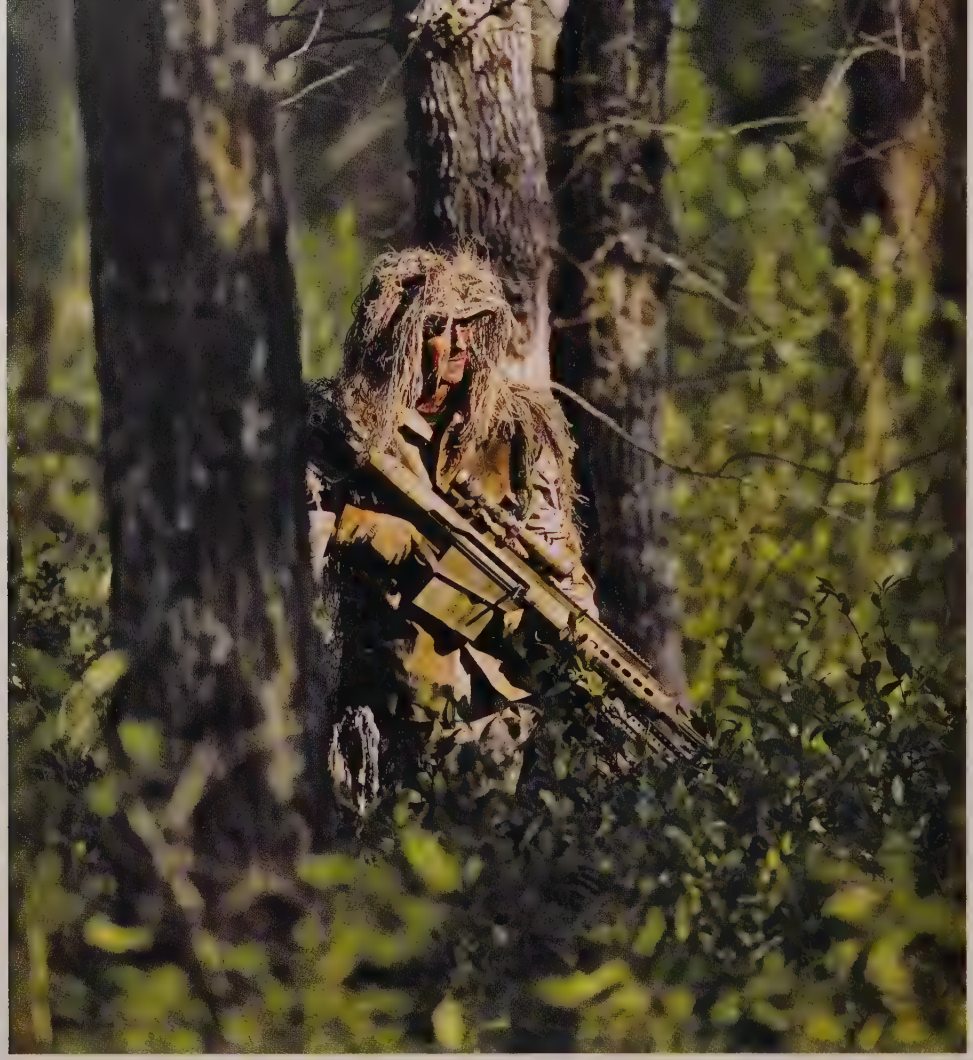
A pair of MARSOC Marines makes a waterborne insertion, using Draeger LAR-V rebreathers. The closed-circuit self-contained breathing apparatus does not emit any bubbles to alert the enemy to their presence. They are armed with M4A1 carbines equipped with AN/PEQ-2 IR laser sights and suppressors. The Marine on the left has fitted his carbine with an EOTech holographic sight, while the one on the right is using an ACOG optic. Weapons at the ready, they will keep the mouthpiece of their rebreathers in place, in the event they need to make a hasty return to the water. USMC PHOTO

Two Marines with a Marine Special Operations Company are on the lookout for possible Taliban fighters in a village in Helmand province, southern Afghanistan. The MSOC unit and Afghan National Army soldiers were visiting the village in which they had distributed humanitarian aid. USMC PHOTO, STAFF SGT. LUIS P. VALDESPINO JR.

Marines with 3rd Marine Special Operations Battalion, MARSOC, conduct a direct action hit during training at the Mountain Warfare Training Center located in the Sierra Nevadas, northwest of Bridgeport, California. The training was part of a three-week exercise in which the operators sharpened their skills in an environment containing elevations up to 7,500 feet above sea level. USMC PHOTO, SGT. STEVEN KING

## Marine Special Operations Battalion

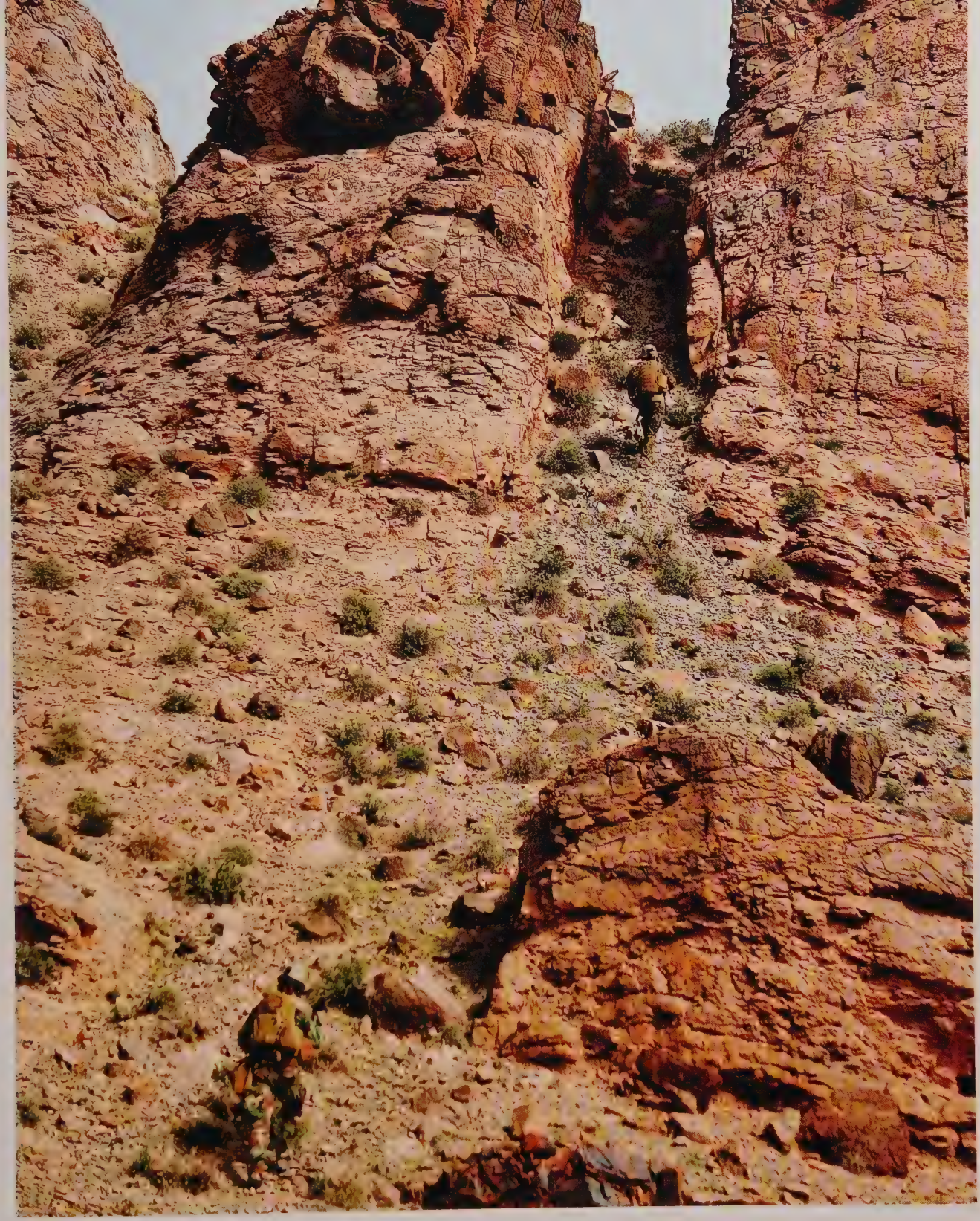
MSOB Marines train in special reconnaissance, sniper skills, specialized insertion and extraction that includes helicopter operations, open and closed-circuit diving, and the full spectrum of airborne operations from static line to military free-fall operations (i.e., HALO/HAHO; close quarters battle, precision marksmanship, and coordinated reconnaissance and direct action mission profiles). Training in these skills is geared to a unique set of special operations conditions and standards. With the activation of the MSOBs, the Marines deactivated the 1st and 2nd Force Reconnaissance companies. In October 2008, by the direction of the commandant of the Marine Corps (CMC), the D companies within both 1st and 2nd Reconnaissance Battalions were redesignated as "Force Reconnaissance" companies and placed under the operational control of the Marine expeditionary force, particularly I MEF and II MEF, accordingly. These companies will assume the traditional deep reconnaissance and supportive arms mission, and will deploy in support of the current directive required by the Marine Corps.



When it positively, absolutely has to be destroyed overnight, send in a Marine with an M107 special application scoped rifle. Wearing a ghillie suit to blend in with his surroundings, this Marine sniper moves stealthily through the woods to his objective. Once on site he may wait hours, perhaps days, to engage his target. MARSOC PHOTO

### 1st Marine Special Operations Battalion

The 1st Marine Special Operations Battalion (MSOB) is headquartered at Camp Pendleton, California, on the same real estate originally occupied by Det One. The mission of 1st MSOB is to organize, equip, and train its Marines to be ready to deploy for operations around the world as directed by MARSOC. Each of the battalions consists of four Marine special operations companies (MSOCs). Each company in turn is made up of four Marine special operations teams (MSOTs). The MSOT is where the boots hit the ground; it operates with a fourteen-man team, complete with critical skills operators (CSOs—a.k.a. "door kickers"), communications specialists, corpsmen, intelligence, fire support, and other support personnel. MARSOC's organization at the Marine special operations company (MSOC) level is different from other special operations forces (e.g., the Army's SF Operational Detachment Alpha [ODA] operates a twelve-man team, and a SEAL platoon is seventeen men). The Marines integrate a direct intelligence and enabling package within the MSOC to provide enhanced situational awareness for each team.



A U.S. Marine Corps Forces, Special Operations Command Marine and Combined Joint Special Operations Task Force soldier move to a higher position during a route recon patrol through Farah province, Afghanistan. The rugged terrain makes it difficult to hunt down the elusive enemy . . . but not impossible. USAF PHOTO, STAFF SGT. NICHOLAS PILCH

Marines with a Marine Special Operations Company take aim on Taliban fighters in a Helmand province village in late February 2008. Afghan National Army soldiers and the MSOC Marines were visiting the southern Afghanistan village when they were attacked by Taliban fighters. A MK 19 40mm automatic grenade launcher can be seen in the cupola of the ground mobility vehicle. USMC PHOTO, STAFF SGT. LUIS P. VALDESPINO JR.

### 2nd Marine Special Operations Battalion

The 2nd MSOB was activated on May 15, 2006, and is headquartered at Camp Lejeune. Each of the MSOBs is commanded by a lieutenant colonel, while the MSOCs are commanded by a major. Each of the MSOCs is capable of deploying a task-organized expeditionary SOF team to conduct core SOCOM missions in support of the geographic combatant commanders (e.g., CENTCOM, etc.). On January 4, 2007, Fox Company deployed for real-world operations with the 26th Marine Expeditionary Unit (MEU) in support of Operation Enduring Freedom.

### 3rd Marine Special Operations Battalion

The 3rd MSOB is also stationed at Camp Lejuene and deploys at the direction of the MSOR. In addition to the Marine operators, it is planned to have at least one special amphibious recon corpsman (SARC) deploy with every team, with an independent duty corpsman (IDC) a step above that. Currently, the MSOTs have a mixture of SARCs and IDCs. Worth noting is these corpsmen, regardless of Navy rating, are active members of the MSOT and are all shooters.

## MARINE SPECIAL OPERATIONS SUPPORT GROUP

The MSOSG was activated on January 19, 2007, at Camp Lejeune. The MSOSG equips, trains, structures, and provides specially qualified Marine forces. These forces include operational logistics, intelligence, multipurpose canine (K9) teams, and firepower control teams, as well as communications specialists, who sustain worldwide special operations missions as directed by Commander, Marine Corps Forces Special Operations Command (COMMARFORSOC).

### Marine Special Operations School

The MSOS was activated at Camp Lejeune on March 11, 2007. The mission of the school is to screen, assess, select, and train Marines and sailors for special operations assignments in MARSOC. The MSOS is the training and education proponent in support of MARSOC, providing advanced individual special operations training. The school is tasked with the mission of conducting the following programs: assessment and selection (A&S); entry-level special operations training for both noncommissioned officers (NCOs) and company grade officers for special operations asssignments in MARSOC; the component's exercise program; advanced and specialty courses; and development of MARSOF standards, doctrine, tactics, techniques, and procedures. The MSOS also serves as the liaison for training and education between MARSOC and SOCOM schools.

### Marine Special Operations Intelligence Battalion (MIB)

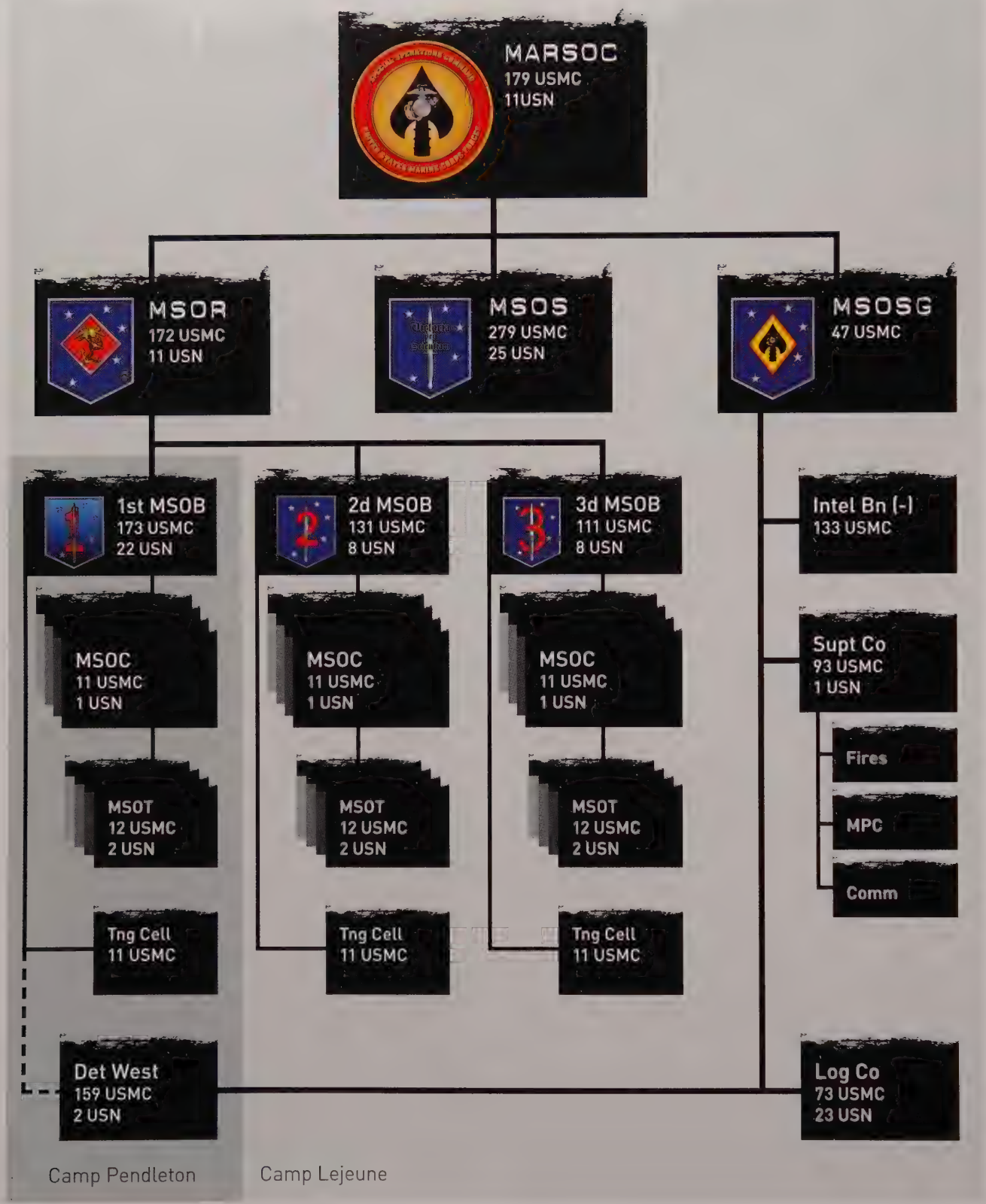
The mission of the MIB is to train, sustain, and maintain combat readiness, and provide intelligence support at all operational levels in support of MARSOF training and operations around the world with mission-specific intelligence capability. Since its inception on August 27, 2009, the command participated in more than twenty-eight deployments to thirteen countries in support of MARSOC missions. The MARSOC Intelligence Battalion produces the direct support teams, SOTF (special operations task force) enhancements, and other capabilities as needed by the commander of U.S. Special Operations Command, and the commander of U.S. Marine Corps Forces, Special Operations Command.

The commander of the MIB, Lt. Col. Nicolas Vavich, stated: "Special operations are really not about going after any target at the first available time. Special operations are about choosing the right target at the time and place of our choosing to shape and influence the battle space in today's really complex and multidimensional environments. It is the exceptional Marines of Marine Intelligence Battalion, both east and west coast, who provide that capability to this component, and make MARSOC's contribution unique to the special operations community."

MARSOC is continuing its consistent, steady march to its authorized strength of 2,600 Marines by 2014. Currently MARSOC has just over five hundred trained CSOs, with an end strength of about eight hundred CSOs. MARSOC needs to create about three hundred more CSOs and about six hundred more Marines in total to reach its current authorized end strength.

### MARSOC MISSION STATEMENT

U.S. Marine Corps Forces, Special Operations Command (MARSOC), as the U.S. Marine Corps component of U.S. Special Operations Command (USSOCOM), recruits, trains, organizes, equips, and, when directed by the commander, USSOCOM, deploys task-organized, scalable, and responsive U.S. Marine Corps Special Operations Forces (MARSOF) worldwide to accomplish the special operations (SO) mission assigned by the commander of USSOCOM and/or in support of combatant commanders and other agencies.




MARSOC organization (as of October 2010)

Afghan National Policemen and U.S. Special Forces engage insurgents on the far side of a canal while pulling security near the village of Hyderabad. A combined force totaling more than 350 international troops emplaced a Dry Support Bridge (DSB) across a canal near a Forward Operating Base in the area. The DSB is the first of its kind to be emplaced in Afghanistan. USMC PHOTO, SGT. BRIAN KESTER

## OPERATION RED THUNDER: MARSOC IN ACTION

The village of Shewan in the Farah province of Afghanistan was a Taliban stronghold. The security situation was so bad that Gen. Stanley McChrystal, the commander, International Security Assistance Force (ISAF), could not visit the location. The Taliban had more than four hundred fighters in Shewan, and several coalition and Afghan soldiers had been killed by Taliban forces in the village. This was all about to change.

In August 2009, 1st MSOB landed in Afghanistan and joined the current MARSOC contingent operations in this area of responsibility (AOR). The new unit's arrival was in time to take part in the largest special operations to be conducted in the AOR to date. The mission was to take Shewan back from the Taliban. The mission, code-named "Operation Red Thunder," would involve 125 MARSOC/SF and more than six hundred Afghan soldiers and Afghan commandos. The Farah provincial reconstruction team, the 82nd Airborne Division, and the local Afghan National Police would provide additional support.

The mission began on September 26, 2009. During the operation, the air above Shewan was filled with AFSOC

### MARSOC CORE CAPABILITIES

**Direct Action (DA)**—short-duration strikes and other small-scale offensive actions taken to seize, destroy, capture, recover, or inflict damage in denied areas.

**Special Reconnaissance (SR)**—acquiring information concerning the capabilities, intentions, and activities of an enemy.

**Foreign Internal Defense (FID)**—providing training and other assistance to foreign governments and their militaries to enable the foreign government to provide for its country's national security.

**Counterterrorism (CT)**—measures taken to prevent, deter, and respond to terrorism.

**Unconventional Warfare (UW)**—operations conducted by, through, and with surrogate forces that are organized, trained, equipped, supported, and directed by external forces.

**Information Operations (IO)**—operations designed to achieve information superiority by adversely affecting enemy information and systems while protecting U.S. information and systems.

A Marine from 3rd Marine Special Operations Battalion performs a fast rope insertion from a UH-1 Huey helicopter during a maritime mobility exercise at Camp Lejeune. USMC PHOTO, SGT. EDMUND HATCH

AC-130 gunships, Army AH-64 Apaches, Marine AH-1 Cobras, Air Force A-10 Thunderbolts, and F-16 Falcon fighters providing close air support for the ground forces. The peak of the fighting occurred on September 29, so intense that the gunships overhead ran out of ammo. MARSOF and SF teams soon brought the conflict to an end through deadly and accurate small arms fire and precision air strikes. There was no doubt in anyone's mind that the air supremacy was the difference maker, and the operation was successfully completed on October 1. In four days of fighting, one Marine and three Afghan soldiers were killed in action; no civilians were killed. Sixty-five Taliban fighters were killed.

Prior to the operation in September, the MSOC commander had met with a former Taliban who warned: "In the past, many have tried to take Shewan and failed. . . . The Soviets tried to take Shewan and failed. The coalition forces have already tried to take Shewan and failed. You will fail if you try to take Shewan." For the men and women of SOCOM, failure is not an option, and Operation Red Thunder did not fail. The mission was such a success that the Defense Department is looking at the operation as a possible template for future operations. According to the MARSOC GFC, "The important takeaway was that we cleared the village (Afghan to USSF, 5 to 1 ratio) and held the village. . . . We didn't leave."

Operation Red Thunder helped clear the way for foreign and domestic aid to reach the people of Shewan and Bala Baluk district as a whole. While Shewan was still a volatile place, great progress had been made with the assistance of the Afghan National Army and the Afghan National Police, both of whom provided security for the medical outreach program.

For the first time since the Taliban had taken over, members of the Shura (village elders) were able to enter the white mosque, which had been used by the Taliban as a headquarters. On October 22, 2009, they attended a meeting there in which the Farah province governor, Rahool Amin, spoke about the rebuilding of Shewan. The governor's visit was the first of many planned visits by the local government in an effort to help Shewan remain Taliban free. As the rebuilding phase continued, there was security and safety again in Shewan, and the locals reported on the Taliban weapons caches.

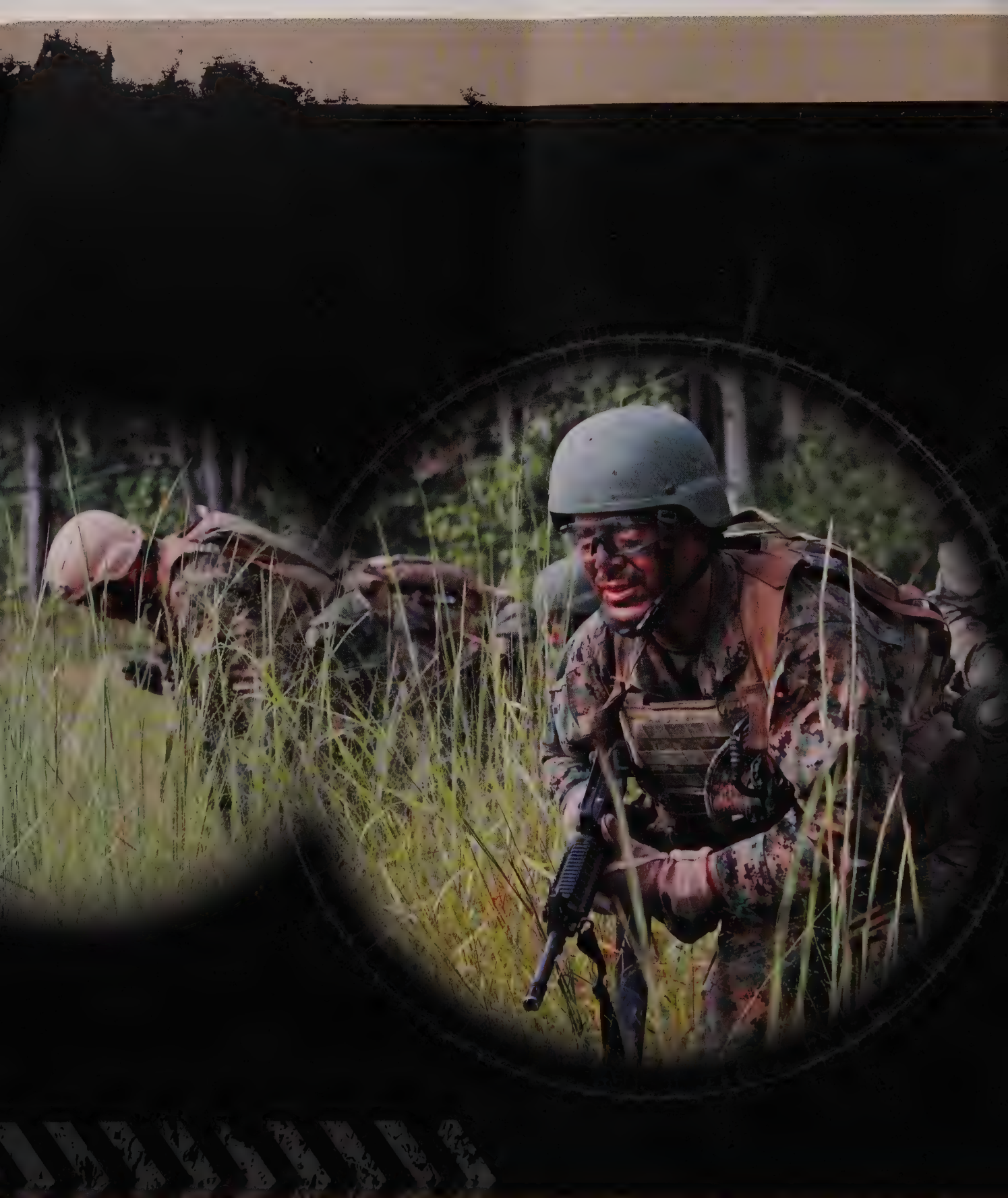
The commander of the Afghan National Army conducts the preoperation briefing for Operation Red Thunder. The mission was to take the city of Shewan back from the Taliban, which had more than four hundred fighters controlling the area. MARSOC PHOTO

A MARSOC officer is the ground force commander (GFC) for Operation Red Thunder, which involved 125 MARSOC/SF shooters and more than six hundred Afghan soldiers and Afghan commandos. In the fall of 2009, coalition forces successfully cleared the strategic village of insurgents without a single civilian casualty. One of the things that set special operations operators apart from their conventional brethren is the fact that they sweat the details. MARSOC PHOTO

A Special Forces soldier kicks open a door during the battle in Shewan. The expertise of the American Special Operations Forces, accurate small arms fire, and precision close air support routed the Taliban fighters from the city. The battle raged on for four days, resulting in sixty-five Taliban killed. USASOC PHOTO

The three months following Red Thunder were spent rebuilding the village and jump starting the local economy. The process wasn't easy; the local populace had to be shown an attractive option to Taliban rule. Marines and soldiers worked hand in hand with the local Afghan leaders and awarded several contracts to rebuild the village and create jobs. Three schools were built, roads were repaired, and several agricultural projects were aimed at stopping the flow of illegal poppy farming. Getting a farmer to switch from profitable poppy to wheat proved to be challenging, but not impossible.

On January 22, 2010, Gen. Stanley McChrystal and his staff visited numerous sites throughout Regional Command West, including Shewan. Arriving at Shewan via CH-47 Chinook helicopter from Forward Operating Base Farah, the general said: "The last time I was here in Farah, I heard firsthand about how bad Shewan was getting. This time, I got to actually go there and see the recent progress for myself, thanks to the noteworthy clearing operation there. Your Marines have done some amazing work here and the people of Afghanistan will not forget it. The American people are proud of you."



CHAPTER 4

# SELECTION AND TRAINING

IN A STATEMENT to the House Armed Services Committee in January 2007, Major General Hejlik related: ***"MARSOC currently recruits, screens, assesses, and selects in service. MARSOC does not direct recruit; it is dependent on the USMC and USN for mature personnel well into their first five to ten years of service. MARSOC selection standards are set by conducting mission analysis on assigned special operations forces core tasks, developing mission essential task lists, determining what skills are required by Marines and sailors to complete those, and then determining what attributes a Marine or Sailor needs to have coming into MARSOC. The attributes MARSOC is looking for are those that enable the candidate to accept the greater responsibility of conducting special operations missions independent from large formations to a unique set of conditions and standards. MARSOC has identified applied intelligence, leadership (to include judgment, maturity, and cultural aptitude), and physical ability (including both determination and fitness) as selection criteria. MARSOC will not sacrifice quality for quantity in this process."***

The demands of MARSOC special operations assignments means they are looking for more than a "few good men." They are looking for the best of the best. The mere fact they are drawing from the Corps itself, where every Marine is a rifleman, gives them a leg up on most of the other services. Currently, all USMC military occupational specialties (MOSs) are eligible to apply for service with MARSOC. To fill the ranks with the right Marines starts with a thorough screening process designed to ensure that those who get assigned to MARSOC meet or exceed the established prerequisites.

The screening is a three-phase process which includes: (1) records screening, ensuring the candidate meets the MARSOC prerequisites and is medically qualified to participate in the assessment and selection (A&S); (2) physical screening consisting of physical fitness testing and swim assessment; and (3) intelligence testing, psychological evaluation, and final medical screening once the Marine reports to A&S. While all Marines seeking assignment to MARSOC undergo the screening process, only those Marines who want to train as CSOs must attend the A&S.

**Critical Skills Operators (CSOs)** are the Marines who conduct the real-world, no-kidding missions. They are the boots on the ground, the door kickers and shooters. They make up the MSOTs. MARSOC Marines receive specialized training in accordance with their assigned special operations core tasks. The Marines work closely with U.S. Army Special Forces and Navy Special Warfare Command SEALs to ensure MARSOC Marines and sailors have skills fully integrated and interoperable on the battlefield. Those Marines who make it as operators possess the essential combination of maturity, mental agility, physical strength, and motivation. CSO Marines have a minimum tour requirement of five years within the command.

OPPOSITE: The final exam on the Individual Training Course (ITC) is the Derna Bridge exercise. Similar to the Special Forces' Robin Sage exercise, Derna Bridge requires the Marines to utilize all of the skills taught them during the course. Upon successful completion of the ITC, the Marines become critical skills operators, and are assigned to one of the three Marine Special Operations Battalions. USMC PHOTO, LANCE CPL. THOMAS W. PROVOST

**Direct Combat Support (DCS)**, as the name implies, provides direct support to the CSOs in a combat environment. These support functions include intelligence, infantry/recon, logistics, field artillery, explosive ordinance disposal (EOD), signals intelligence (SIGINT), and military police dog handlers. Although they are not required to attend A&S, they will often deploy with the operators into combat. For this reason, they are required to go through the same screening process as the CSO Marines.

**Combat Service Support (CSS)** are active duty and reserve Marines who fill billets within MARSOC. Depending upon mission requirements, they may or may not deploy with the unit. Members of the CSS are not required to attend the A&S.

Regarding whether duty with MARSOC is a career path for a Marine or a rotational assortment, Maj. Jeff Landis, MARSOC PAO, stated: *"Due to the nature of our business and the natural occurrence of rotations, it is important to maintain a strong, capable team. Team cohesion and expertise are integral to success in any special operations force and can only be built over time. With the strategic*

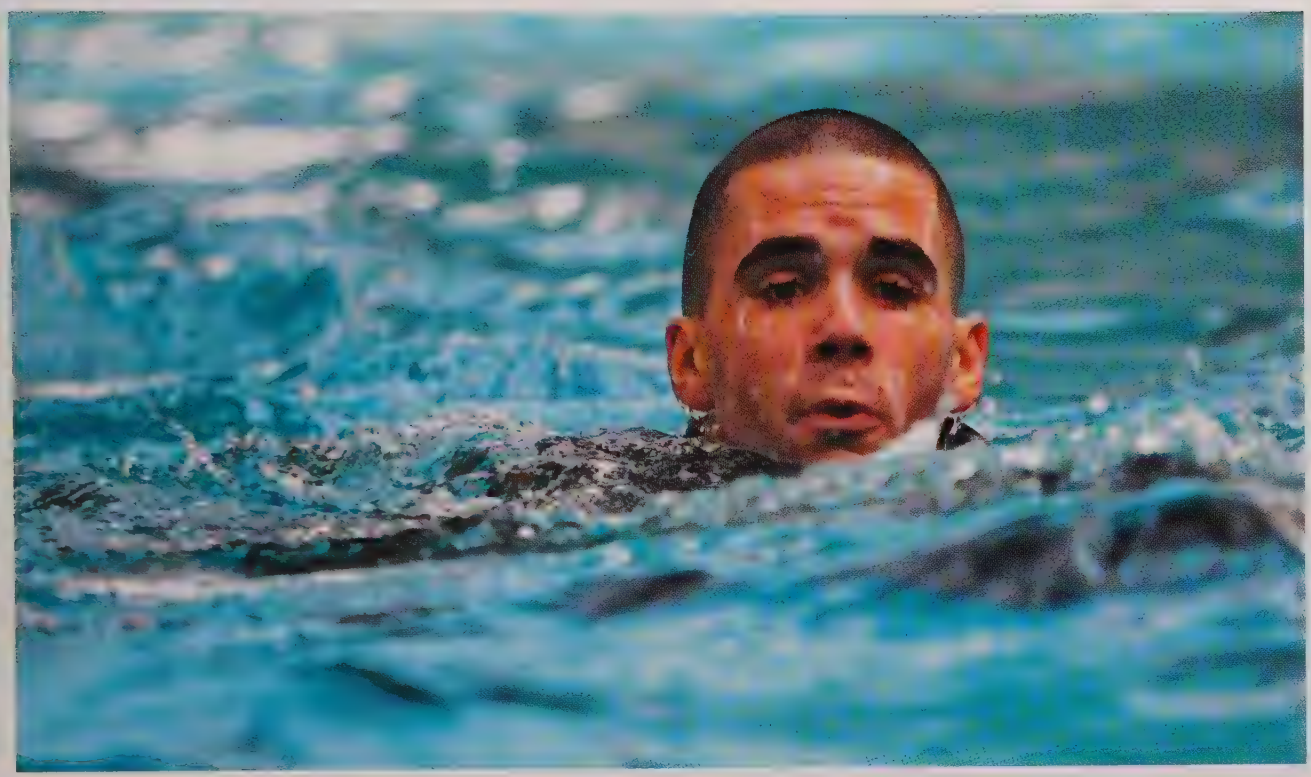
ABOVE: Marines who are in a direct combat support role will provide the intelligence, logistics, and a myriad of other functions for the MSOT. While they are not required to go though the assessment and selection process, they will go through the same screening process as the critical skills operators. Students in the Network Operators Course communicate with operators in the field during the course's final exercise. This photo was taken during the fourth iteration of the thirteen-week course. USMC PHOTO, LANCE CPL. KYLE MCNALLY

OPPOSITE: Critical skills operators (CSOs) are the Marines who conduct the real-world, no-kidding missions. They are the boots on the ground, the door kickers and shooters. These special operations Marines work closely and often in tandem with other SOCOM units, such as U. S. Army Special Forces and U.S. Navy SEALS.

Marines in U.S. Marine Corps Forces, Special Operations Command's new Assessment and Selection Preparation and Orientation Course conduct a ten-mile hike at Camp Lejeune, North Carolina. ASPOC is designed to prepare critical skills operator candidates for the challenges of assessment and selection. USMC PHOTO, LANCE CPL. KYLE MCNALLY

***complexities of the environments and the need to maintain continuity in the teams, it is also important to have longer tour lengths than the standard three-year tour. Therefore, MARSOC personnel are not bound by traditional tour lengths. We have said for several years now, that we would like to create an MOS that provides our operators a defined career path—we think this is an important part of our continued growth in terms of capacity and the ability to attract and keep well qualified and competent Marines, offering them a clear career path, with growth, opportunities for promotion, etc. As for rotations, we are retaining our experienced and trained Marines for longer tours as a result of Headquarters, Marine Corps authorization for Marines to remain beyond the 60-month tours with incentives for Marines reenlisting and remaining in MARSOC."***

Once a Marine has passed the screening process, he will then be invited to attend assessment and selection. Held five or six times a year, A&S requires the Marine to endure nineteen days of physical and mental challenges while under constant evaluation by the training cadre. The assessment enables the MARSOC instructors to identify those Marines who have the necessary attributes to complete the follow-on training and conduct special operations missions. MARSOC teams will often operate in austere environments, under adverse conditions, and in hostile territory. They must be mature, physically fit, and able to make the right decisions at a moment's notice. Candidates going through the A&S process are evaluated on a variety of criteria such as mental aptitude, swimming, land navigation, ruck marches, and so on. Each day the instructors look for the Marine who has the



One of the demanding physical challenges for Marines in ASPOC is a three hundred-meter swim. USMC PHOTO, LANCE CPL. THOMAS W. PROVOST

## MARSOC CREED

**M**y name is Marine. My title is MARSOC Silent Warrior, and I exemplify both with equal vigor and determination. My judgment, initiative, and professionalism are the hallmarks of my position.

**A**lways Faithful, Always Forward in the fight to defend our Nation and our way of life. I will never surrender, I will never fall back, and I will always remember the Marine Warriors who have gone before me. I will defend, with my life, the honor and legacy of our great fighting spirit.

**R**ealizing that the battlefield is always changing, I will train with fervor and intensity to ensure that I will excel in any environment and in all conditions. I will set the example for all Warrior Marines. My skill and knowledge will inspire them to follow me.

**S**emper Fidelis will be the guiding principle in my life and chosen profession. I will be faithful to my God, my Corps, my family, and my comrades. I will never fail those who guide me, support me, love me, and fight with me.

**O**utstanding leadership in combat, training, in the field, formation in garrison, and on liberty. I will lead Marines and ensure that they are ready, relevant, courteous, and respectful. By my own example and with concerned leadership, I will forge the next generation of Special Operations Forces warrior leaders.

**C**ommitted Special Operations Forces Marine tested by trial and examination. I am a Silent Warrior. I am a Marine by the Grace of our God.

Land navigation is emphasized throughout MARSOC training. The Marines are outfitted with the latest GPS equipment, but batteries fail at the most inopportune times and rucksacks may have to be dumped if escape and evasion (E+E) becomes necessary. For this reason the Marines turn to the time-honored practice of using a map and lensatic compass.

"right stuff," the operator who will be able to meet the demands of MARSOC.

The A&S process is so challenging that the Marine Special Operations School implemented a new training course. The Assessment and Selection Preparation and Orientation Course (ASPOC) serves as the precursor to the Assessment and Selection Course. This three-week course is designed to enhance the candidates' physical capabilities and prepare them mentally for A&S. With the current OPTEMP, some of the Marines are coming directly from warfighting to selection. This new course gives them the opportunity to acclimate to the new environment prior to the actual A&S process.

## INDIVIDUAL TRAINING COURSE

A Marine with the Marine Special Operations Company, 1st Marine Special Operations Battalion, assesses a simulated head wound on a role-player during a nighttime raid through a village. During the Individual Training Course (ITC), the Marines are instructed in tactical combat casualty care. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

After selection, the Marine will be assigned to the individual training course (ITC). The ITC is a seven-month course in which the candidates will be challenged anew both physically and mentally. The product of the ITC is the critical skills operator (CSO), who will be able to operate across the spectrum of MARSOC core missions, "in every clime and place." The course is set up to simulate the rigors, stresses, and complexities of combat while under the close inspection of the evaluating instructors. The ITC is broken down into four phases of training.

**Phase One**—lasts ten weeks and is devoted to the basic skill set required by all special operations forces. The physical training (PT) program is designed around endurance, functional fitness, and amphibious training, with an emphasis placed on physical fitness, swimming, and hand-to-hand combat. This PT continues throughout the course to prepare the operator for the demands of a special operations environment. Phase One also concentrates on field skills, such as land navigation; individual and small unit tactics; patrolling; Survival, Escape, Resistance, and Evasion (SERE); and Tactical Combat Casualty Care (TCCC). Rounding out the phase will be training in mission planning, fire support, and communications.

ABOVE: In the first phase of ITC, the emphasis is on physical training, fitness, and endurance. This includes teaching the students hand-to-hand combat. Phase One concentrates on the skills and physical demands that the operators will experience during actual special operations missions. USMC PHOTO

OPPOSITE: All Marines are riflemen first and have been through the School of Infantry. In the ITC, instructors will go over small unit tactics and take the students to the next level and beyond. Operating in small fourteen-man teams, behind enemy lines, and in austere conditions, MARSOC operators have little room for error. Instructors adopt the adage, "the more one sweats in training the less you will bleed in battle." USMC PHOTO, MARSOC PAO

**Phase Two**—lasts eight weeks and concentrates on small unit tactics. Building on the foundation of Phase One, the students receive training in small boat and scout/swimmer operations, crew served weapons, demolitions, photography, and collecting and reporting of intelligence. The culmination of this phase of training is two full-mission profile exercises. The first is Raider Spirit, a two-week field exercise in which the students will reinforce the skills learned as they conduct patrolling and combat in simulated high-stress environments. The second is Operation Stingray Fury, which focuses on urban and rural reconnaissance.

During demolitions training, a Marine attaches the blasting cap at the end of a timed fuse. The fuse is attached to three detonation cords connected to three separate explosives for simultaneous detonation during the practical application portion of the demolition and logistics. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

A Marine takes pictures of role-players acting as terrorists during the culmination of a three-week-long special reconnaissance training module at the Military Operations in Urban Terrain facility at Camp Lejeune, North Carolina. During the exercise, Marines trained to collect information on mock enemy forces. USMC PHOTO, CPL. RICHARD BLUMENSTEIN

A Marine reviews an image he took of a role-player acting as a terrorist during the culmination of a special reconnaissance training module at Combat Town, Camp Lejeune, North Carolina. The Marine Technical Surveillance Course lasts for seventy-two days. During the exercise, Marines are trained to collect information on mock enemy forces, using digital imaging and computers.

ABOVE: From the beginning of their training, all Marines are riflemen first. Those Marines who have been selected and continue through ITC will hone their marksmanship skills. The very nature of special operations missions often relies on precise aiming and firing on the move. Here a Marine sends a few rounds downrange using his M4A1 carbine. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

RIGHT: Marksmanship does not end with the primary weapon, the carbine. There are occasions when the operator has to use his pistol. For this reason, ITC requires the students to sharpen their pistol skills. Here a Marine uses his M1911 .45-caliber semiautomatic pistol on close-in targets. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

**Phase Three**—lasts five weeks and covers close quarters battle (CQB), in which students train in combat marksmanship using rifles and pistols. They are taught the tactics, techniques, and procedures that they will use in assault operations as a member of a Marine special operations team. During this time the Marines also receive instruction in communications, ranging from satellite communications (SATCOM) to high-frequency radios and data systems. Phase Three ends with a series of full-mission profiles called Operation Guile Strike. These exercises will concentrate on the special reconnaissance (SR) skills that focus on precision raids on urban and rural objectives.

The Marines of MARSOC have the capability to provide the enemy with the maximum opportunity to give their life for their cause. It could be a long-range sniper round, or by calling in close air support. There are times when the work becomes up close and personal. For those occasions the Marines employ speed, surprise, and violence of action. These hallmarks of close quarter battle are emphasized during ITC. In the world of special operations missions, there are no points for second place. USMC PHOTO, MARSOC PAO

Two Marines set up a satellite communications (SATCOM) antennae during training. During ITC, students receive instruction in a wide variety of communications, ranging from SATCOM to high-frequency radios and data systems. Communications can serve as a lethal weapon or a lifeline when in battle. USMC PHOTO, CPL. KEN MELTON

Helicopter Rope Suspension Training (HRST) school teaches Marines how to insert and extract in environments where it is not possible or practical to land a helicopter. Marines fast-rope during training at Camp Lejeune, North Carolina. The training for the day is the practical application of fast rope insertion/extraction system (FRIES) from an Osprey. USMC PHOTO, LANCE CPL. DANIEL A. WULZ

**Phase Four**—The final phase of training presents the students with instruction on irregular warfare and lasts for seven weeks. The training ends with Operation Derna Bridge, which is similar to the Special Forces Robin Sage exercise. Derna Bridge is designed by the Marine Special Operations School to provide realistic training in irregular warfare. During this field exercise, the students will utilize all of the skills acquired throughout the ITC, requiring them to train, advise, and operate with a partner nation/irregular force. This is the final evaluation before the Marines graduate as MARSOF operators. Upon graduation, the CSO will be assigned to one of the three MSOBs.

MARSOC is steadily building its force. The goal of the command is to recruit, assess, select, and train approximately 165 CSOs each year to reach the authorized end strength of 2,600.

## Advanced Training Courses

Once assigned to an MSOB, the Marines may qualify for advanced training and qualifications in combat skills, such as Airborne Training, Scuba, Advanced Language Training, CQB Leader Breacher, Advanced Sniper, Tactical Acquisition Exploitation (SR level II), Hostile Forces Tagging Tracking Locating (HFTTL), Helicopter Rope Suspension Training (HRST), Advanced EOD, Joint Terminal Attack Controller (JTAC), Unmanned Aircraft System (UAS) Operator, and specialized Survive, Evade, Resist, and Escape (SERE). A number of these advanced courses are taught at the MSOS, while others require the Marine to attend training at various bases. Some of these schools are listed as follows.

**U.S. Army Airborne School,** Fort Benning, Georgia. For the next three weeks, the Marines will be taught the basics needed to become "airborne" qualified. They learn the skills they will build upon to perform an insertion via parachute. Basic airborne training is broken into three weeks: Ground, Tower, and Jump Week.

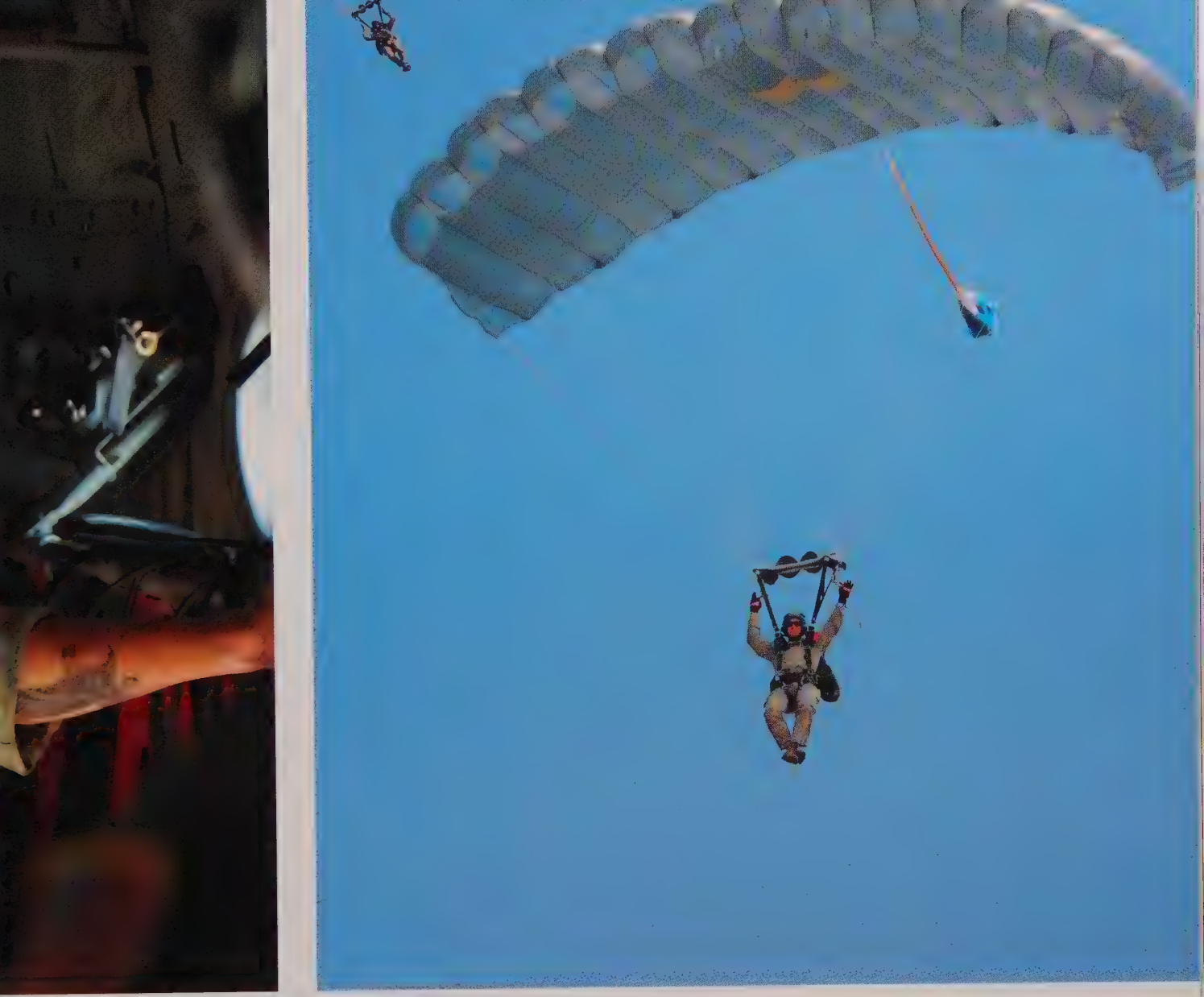
Ground Week begins with an intensive program of instruction designed to prepare the Marine to complete his parachute jump. He will learn how to execute a parachute landing fall (PLF) to land safely in the LZ. Using mockups of a C-130 and a C-141, he learns the proper way to exit an aircraft.

An airborne trainee jumps from the 35-foot tower at Fort Benning, Georgia. During Tower Week, the students build confidence as they practice their parachuting skills in preparation for the actual jump. Tower Week also gives trainees practice in controlling their parachutes during the decent from the 250-foot tower and executing a parachute landing fall (PLF) upon landing. During this phase of training, the fledgling paratroopers also learn how to handle parachute malfunctions.

Airborne training for MARSOC Marines is conducted at Fort Benning. During these three weeks, the Marines learn the basic skills necessary to insert via parachute. After the successful completion of five jumps, the paratrooper earns Silver Wings. To obtain the USMC Gold Wings, they must successfully complete an additional five jumps meeting rigorous Marine Corps standards.

Next is Tower Week. Using a training device known as the swing landing tower (SLT) on which he is hooked up to a parachute harness, the trainee jumps from a twelve-foot-high elevated platform; the apparatus provides the downward motion and oscillation simulating that of an actual parachute jump. During week two the student gets to ride the Tower, which is designed to give the student practice in controlling his parachute during the decent from 250 feet, and execute a PLF upon landing.

Week three is Jump Week. The Marine will perform five parachute jumps. Upon successfully completing them, he is certified as "airborne" qualified. Upon graduation of this course, the newly frocked paratrooper wears the U.S.



Marines may attend the U.S. Army Military Freefall Parachutist School at Fort Bragg, North Carolina. After Ground Week, students head out to Yuma Proving Grounds, Arizona. While there, each student performs a minimum of sixteen free-fall jumps that include two day and two night jumps, with oxygen and full field equipment. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

Army silver jump wings, or as the Marines call them "lead wings." To obtain the Gold Wings or the Navy/Marine Parachutist Badge, he must perform an additional five jumps. These include a day and night "slick" jump, which is just with a parachute and no other equipment, and a day and night jump with full equipment. The fifth jump is usually a water jump.

The U.S. Marine Corps **Combatant Diver Course** was designed at the Naval Diving and Salvage Training Center, Panama City, Florida, in conjunction with the Marine Corps Combat Development Command, Quantico, Virginia. The course is designed by Marines, for Marines, with the purpose of providing them with

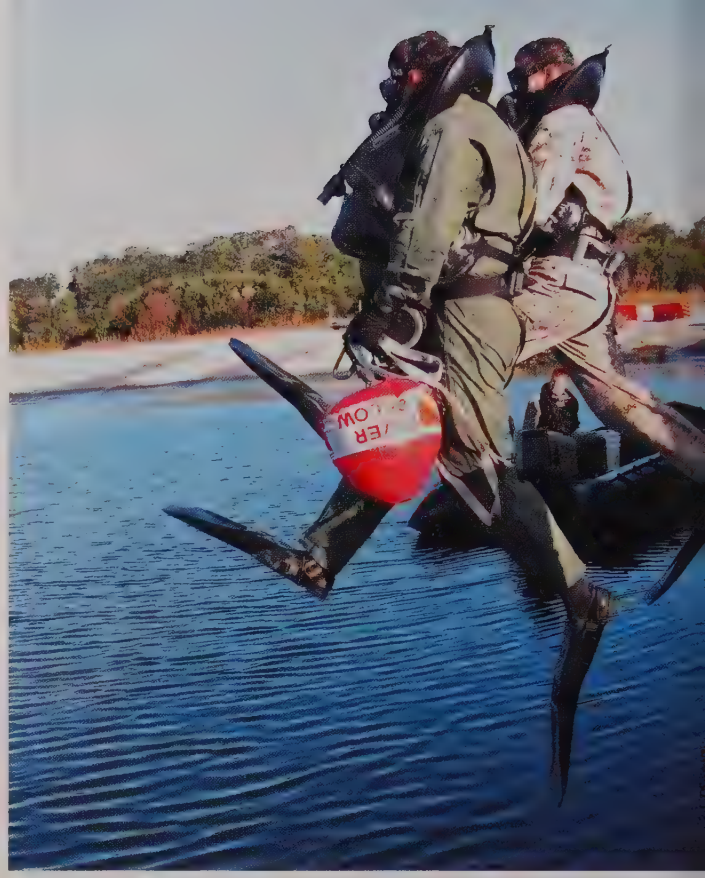
the best possible combat underwater tactical swimming training available. Emphasis is placed on developing the skills required to successfully conduct an underwater infiltration and exfiltration as required by applicable Marine Corps Orders.

Students attending the Combatant Diver Course receive training in the most current tactical doctrines and equipment, including both open- and closed-circuit diving equipment. The course is designed to provide qualified nondiving enlisted and officer personnel with the specialized training necessary to effectively operate as reconnaissance dive team members during underwater infiltration swims. To accomplish their missions, Marines must arrive undetected, on target, while keeping team integrity and maintaining the ability to execute their assigned tasks on respective shore-based objectives.

The Combatant Diver Course is thirty-five training days in length. It is divided into four modules of training: physical conditioning, combat diver fundamentals and medicine, USMC open-circuit diving equipment and operations, and USMC closed-circuit diving equipment and operations. Upon successful completion of the training, the student is certified by the Navy and Marine Corps as a USMC Combatant Diver.

The Marines also receive **Survival, Evasion, Resistance, and Escape (SERE) training** from the MARSOC Personnel Recovery (PR/SERE) branch. Those MARSOF members who will be deployed overseas are given SERE Level-C training. The nineteen-day Level-C training is an intensely physical and mentally challenging program designed to teach the students the necessary knowledge and skills to survive behind enemy lines and evade capture. Should they become prisoners, the course teaches them how to resist interrogation or exploitation, and how to escape from their captors. The Code of Conduct and survival field craft are taught with an emphasis and application to environments worldwide. Full-spectrum training includes classroom instruction, role-playing, field survival, and evasion exercises.

The **Advance Linguist Course** enhances MARSOC's ability to work bilateral missions, counterinsurgency operations, FID, and unconventional warfare (UW) operations by communications directly with host nation forces. All MARSOC Marines are required to undergo continual language skills training. The ALC is divided into five blocks of training, each one building upon the other. Block One begins with sixteen/twenty-four weeks of basic language skills; Block Two is a two-week iso-immersion within the continental United States to build a foundation in their assigned language; Block Three returns the students back to the classroom for twelve/eighteen weeks, expanding and improving his target language; in Block Four those students studying the CENTCOM languages go through a two-week intensive exercise, where they interact daily in role-playing scenarios focusing on those skills needed for real-world missions. In Block Five, there is review of the material and final testing.



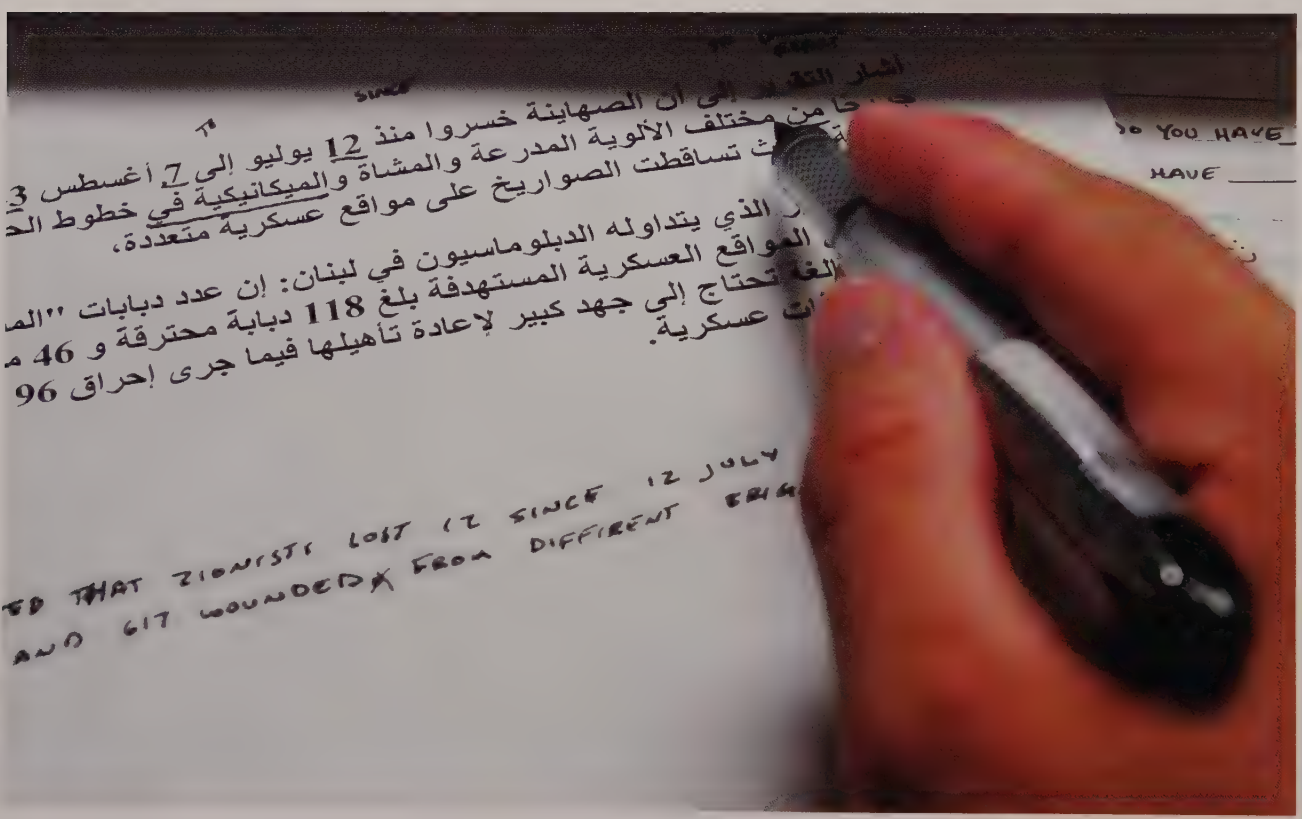
Marines from U.S. Marine Corps Forces, Special Operations Command's 2nd Marine Special Operations Battalion and Marine Special Operations School step off the dock into the murky depths of Mile Hammock Bay near Camp Lejeune, North Carolina. Navy divers with 2nd MSOB and 2nd Marine Division's 2nd Reconnaissance Battalion led the training to help maintain the diver's underwater navigation skills. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

**S**ize up the situation, surroundings, physical condition, equipment; **U**se all your senses; **R**emember where you are; **V**anquish fear and panic; **I**mprovise and improve; **V**alue living; **A**ct like the natives; and **L**ive by your wits. Put them all together, it spells **SURVIVAL**. That is the focus of SERE training. The Survival, Escape, Resistance, and Evasion course teaches students the survival field craft skills as well as resistance, exploitation, and techniques to escape should they be captured. U.S. NAVY PHOTO, MCS1 ROGER S. DUNCAN

The **Marine Advance Sniper Course (MASC)** is a four-week course designed to train MARSOC snipers to the tactics, techniques, and procedures (TTP) in support of MARSOC missions. The MASC is comprised of five blocks of instruction: Block One covers fundamental skills, ballistics, and live fire out to two hundred meters; Block Two covers ballistics software, sniper equipment, engagement techniques, known distance shooting, and practical application of equipment; Block Three concentrates on sniper tactics, foreign weapons, shooting through glass, and shooting at moving targets at unknown distances with a variety of weapon systems from 5.56mm to .50 caliber.

Block Four is the qualification course. The student's score is based on shooting four separate and timed drills, including barricade shooting, day and night shooting, unknown distance, and spotter qualification. The last part of the training, Block Five covers a plethora of sniper TTPs: aerial sniping, explosive loophole breaching, loophole shooting, side prone, high angle, urban hides, vehicle hides, and surveillance equipment. Block Five ends with a four-day reactive exercise in which, using the full spectrum of SOF equipment and weapons, the sniper teams locate targets, conduct surveillance, and eliminate the target as part of a MSOT. Upon successful completion of the course, students are certified as MARSOC snipers.

**Marine Technical Surveillance Course (MTSC)** lasts for seventy-two days, providing instruction on digital collection systems, target acquisition, and exploitation through surveillance. Close-target recon applications



A Marine enrolled in the MARSOC Advanced Linguist Course takes notes in Arabic. Depending on the language, the course can last for up to a year. Dari, Pashtu, or Urdu take fifty-two weeks to complete, while French or Bahasa (the primary language of Indonesia) are thirty-six weeks in length. Not only do the Marine special operators fight in every clime and place, they are able to do so in the language indigenous to the operations area. USMC PHOTO, CPL. RICHARD BLUMENSTEIN

A MARSOC Marine sights in on his target using an M40A3 sniper rifle. The Marine Advance Sniper Course (MASC) is a four-week course designed to train MARSOC snipers in the tactics, techniques, and procedures (TTP) in support of MARSOC missions. USMC PHOTO, SGT. STEVEN KING

The MASC has five blocks of instruction that cover topics from basic fundamentals to aerial and urban environments, both day and night. Upon successful completion of the course, the operator is certified as a MARSOC sniper. Pictured here is a sniper armed with a .50-caliber M107 special application scoped rifle. USMC PHOTO, MARSOC PAO

Marines are stacked behind a Kevlar blast blanket to protect them from the explosive charge on the door. As part of the breaching course, operators learn numerous methods of entry (MOE) into various structures. Using both mechanical and explosive breaching devices, the Marines learn the best techniques to gain access to a building. USMC PHOTO, LANCE CPL. MICHAEL J. AYOTTE

provide up-to-date intelligence from boots on the ground. This bottom-up collection of intelligence and tactical analysis gives the Marines the skills to find, fix, finish, and exploit methodology to destroy terrorist/insurgent networks.

The MTSC is divided into six phases of training. During Phase One, students learn about the Advance Digital Collection Systems (ADCS). This includes data processing, computer security, digital photography, digital image editing, computer assisted drawing, Falcon View, and technical application of equipment to support all phases of an operation.

Phase Two concentrates on surveillance and counter-surveillance. Students will learn various methods of surveillance including planning, foot, vehicle, and multimode TTPs. Instruction is reinforced with practical exercises. Phase Three is close target reconnaissance (CTR), which focuses on target development, survey, and analysis. Phase Four covers method of entry (MOE), in which the students are instructed in the equipment and techniques required to obtain entry surreptitiously. Phase Five is instruction on technical application equipment, installing equipment on hosts and networks.

The course culminates with Phase Six, in which students conduct an exercise utilizing all the skills they have acquired during the course. This exercise is conducted in an area unfamiliar to the students, with a comprehensive scenario supported by role-players. During the exercise, the Marines conduct a reconnaissance patrol to a location where they spend four days operating from an observation post. There, the teams collect information to develop reports on role-players during numerous scenarios ranging from terrorist activities to normal day-to-day activities.

Members of 1st Marine Special Operations Battalion, MARSOC, are lifted from the ground by a CH-46 Sea Knight helicopter using special procedure insertion and extraction system (SPIES) rigging at Camp Margarita, aboard Camp Pendleton. The operators' training is part of MARSOC's Helicopter Rope Suspension Training Masters Course. USMC PHOTO, CPL. RICHARD BLUMENSTEIN

CHAPTER 5

# WEAPONS

WHEN DET ONE (the pilot program for MARSOC) was officially activated in 2003, there were concerns that the Marines would not have the specific weapons, body armor, optics, and other personal protective equipment required for their tasks. Much of the SOCOM gear was beyond the standard USMC equipment issue and was mission essential. The same or closely similar state-of-the-art equipment would be necessary to enable any future detachment to be interoperable and sufficiently able to conduct special operations with other SOCOM units. As the detachment was standing up, it was competing with IMEF for going to war. "Gear was coming in by the truck load," Colonel Coates related. "Nobody had the authority to say 'no' to what we wanted." This chapter will cover the range of weaponry used by MARSOC.

## M4A1 Carbine

Manufactured by Colt, the M4A1 is the carbine version of the full-size M16A2 assault rifle. Designed specifically for the U.S. Special Operations forces, it is likewise the primary weapon of MARSOC Marines. The M4A1's fire selector can be set for semi and fully automatic operation. The weapon is designed for speed of action and lightweight requirements, as is often the case for these CSOs. Its barrel is shortened to 14.5 inches, which reduces the weight while maintaining its effectiveness for quick-handling operations in the field. The issued collapsible buttstock has four intermediate stops, allowing adaptability in CQB without compromising shooting capabilities.

The M4A1 has a rifling twist rate of 1 in 7 inches, making it compatible with the full range of 5.56mm ammunitions. Its sighting system contains dual apertures, allowing for 0–200 meters, and a smaller opening for engaging targets at a longer range of 500–600 meters. Selective fire controls for the M4A1 have eliminated the three-round burst of the M16A2, replacing it with safe semiautomatic and fully automatic fire. A detachable carrying handle, when removed, exposes a Weaver-type rail for mounting a SOPMOD accessories weapon.

The M4A1 carbine is a most capable and deadly weapon suitable to the MARSOC missions. Still, further refinements were requested to make the weapon even more effective, whether for close-in engagements or against long-range

OPPOSITE: This Marine has just fired an M136 AT4 light antitank weapon during a training exercise at the Udairi Range Complex in Kuwait .With a range of 2,100 meters, the AT4's warhead is capable of penetrating 400mm of rolled homogenous armor. USMC PHOTO, SGT. BRYSON K. JONES

ABOVE: The primary weapon of MARSOC Marines is the M4A1 carbine. The weapon on the left is fitted with a crane stock; attached to the rail is an Elcan 1x-4x sight and AN/PVS-22 universal night sight (UNS) with 1x-12x magnification. It has a Surefire M900 vertical foregrip weapon light and an Insight visible light. The operator on the right has fitted his weapon with Magpul CTR stock; attached to the rail is a 1x-4x power scope and PEQ-15 sight. MARSOC

The M4A1 carbine is a compact version of the full-sized M16A2 rifle. The M4A1 has a fire selection for semi and fully automatic operation. The barrel has been redesigned to a shortened 14.5 inches, which reduces the weight while maintaining its effectiveness for quick-handling field operations. USMC PHOTO, MARSOC PAO

targets. To accomplish this, USSOCOM and the Naval Surface Warfare Center's Crane Division developed the SOPMOD Kit. Introduced in 1994, the special operations peculiar modification kit is issued to all U.S. Special Operations forces to expand on the capabilities and operation of the M4A1 carbine. Currently, the U.S. military is looking into further upgrading the M4A1. Whether this will result in a number of additional modifications or a brand-new weapon is still under evaluation.

## M4A1 Acessory Kit

The platform for the SOPMOD kit is the rail interface system (RIS). This system replaces the front handguards on the M4A1 receiver, providing a Mil. Std. 1913 Picatinny rail. The notched rail system is located on the top, bottom, and sides of the barrel, facilitating the attaching of SOPMOD kit components on any of the four sides. The notches are numbered, making it possible to attach and reattach the various components at the same position each time it is mounted. Optical sights and night vision devices can be mounted on the top, while top and side rails would be the choice for positioning laser aiming devices or lights. The bottom of the RIS normally will accommodate the vertical grip and/or lights. When no accessories are mounted to the RIS, plastic handguards are emplaced to provide cover, and protect the unused portions of the rail. While the newer rail system is called the RAS, for rail adapter system, the RIS will accommodate a wider variety of barrels.

The M203 grenade launcher is a lightweight, single-shot, breech-loaded 40mm weapon specifically designed for placement beneath the barrel of the M4A1 carbine. With a quick-release mechanism, the addition of the M203 to the M4A1 carbine creates a versatile weapons system capable of firing both 5.56mm ammunition and an expansive range of 40mm high-explosive and special-purpose munitions. This photo also shows the crane stock.

## M203 Grenade Launcher

The quick attach/detach M203 mount and leaf sight, when combined with the standard M203 grenade launcher, provides additional firepower to the operator, giving him both a point and area engagement capability. The most commonly utilized ammunition is the M406 40mm high-explosive dual-purpose (HEDP) projectile. This grenade's fragmentation effects give it a deadly radius of five meters, and it is capable of penetrating steel armor plate up to two inches thick, making it effective against both enemy personnel and light armor. Additional projectiles include M381 HE, M386 HE, M397 Airburst, M397A1 Airburst, M433 HEDP, M441 HE, M576 Buckshot, M583A1 40mm WS Para Illum, M585 White star cluster, M651 CS, M661 Green star cluster, M662 Red star cluster, M676 Yellow smoke canopy, M680 White smoke canopy, M682 Red smoke canopy, M713 Ground marker—Red, M715 Ground marker—Green, M716 Ground marker—Yellow, M781 practice; M918 target practice, M992 infrared illuminant cartridge (IRIC), 40mm nonlethal round, 40mm canister round, and 40mm sponge grenade. Future development in 40mm grenades will introduce airburst capability that will provide increased lethality and bursting radius through prefragmented, programmable HE warheads.

The quick attach M203 combines flexibility and lethality to the individual weapon. Utilizing multiple M203 setups allows concentrated fire by bursting munitions that are extremely useful in raids and ambushes. They can also illuminate or obscure the target while simultaneously delivering continuous HEDP fire. The M203 grenade leaf sight attaches to the RIS for fire control.

The M203's receiver is made of manufactured of high-strength forged aluminum alloy. This provides extreme ruggedness while keeping weight to a minimum. A complete self-cocking firing mechanism, including striker, trigger, and positive safety lever, is included in the receiver. This allows the M203 to be operated as an independent weapon, even though attached to the M16A1 and M16A2

Marines with 2nd MSOB use their rifle optics to scan the horizon during a patrol through Balu Morghab, Badghis province, Afghanistan. Patrols are conducted regularly throughout the Morghab Valley in order to actively engage the public and disrupt Taliban activity. This Marine has replaced the rail interface system with a Daniels Defense commercial off-the-shelf rail system that allows the barrel to free float, as well as giving him more real estate on which to mount accessories. CJSOTF—A, USMC PHOTO, SGT. EDMUND L. HATCH

A Marine from the 2nd MSOB returns fire on attacking Taliban fighters outside of Balu Morghab. The Taliban opened fire on a patrol consisting of 2nd MSOB Marines and Afghan National Army soldiers. This Marine is using the close quarters battle receiver (CQBR) on his M4A1. The CQBR replaces the standard barrel with a 10.3-inch barrel. This allows the Marine to work in tighter areas and on other tasks in which the compact weapon would be more practical. USMC PHOTO, SGT. EDMUND L. HATCH

rifles and M4A1 carbine. The barrel, also made of high-strength aluminum alloy, has been shortened from twelve to nine inches, allowing improved balance and handling. It slides forward in the receiver to accept a round of ammunition, then slides backward to automatically lock in the closed position, ready to fire.

### Crane Stock

A modification to the M4A1 carbine is the addition of a redesigned collapsible stock designed by the Crane Division of the Naval Surface Warfare Center (NSWC) in Crane, Indiana. This stock affords the operator with a larger surface, giving him a better position for placing his cheek. This "spot weld" provides the user with a more comfortable and stabile firing position than the current tubular design. The wider stock also features storage space on both sides that can accommodate extra batteries for such items as NVGs, flashlights, GPS, etc. Worth noting are other commercial off-the-shelf (COTS) stocks like the Magpul and VLTOR, which are also popular with the special operations Leathernecks.

## TARGET ACQUISITION EQUIPMENT

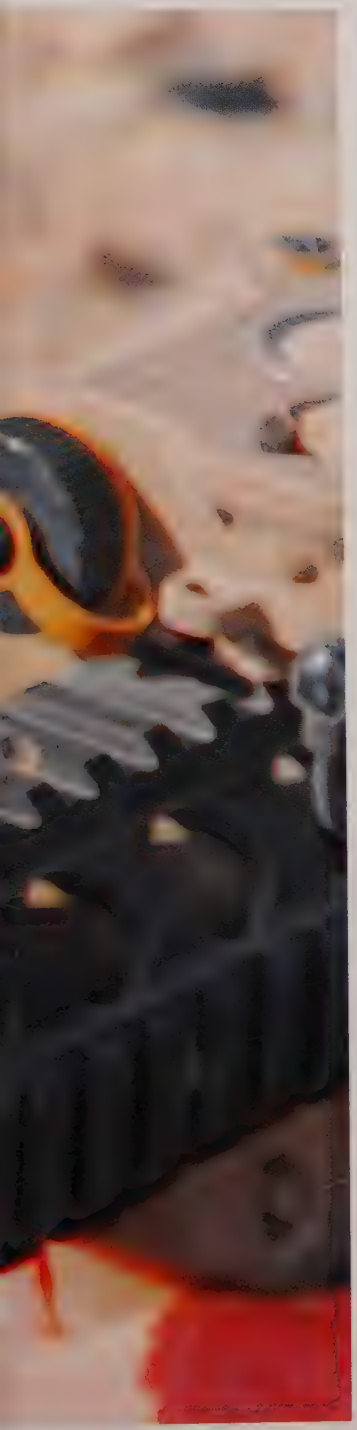
### SU-231/PEQ

The SU-231/PEQ is part of the subprogram of the SOPMOD kit. Manufactured by EOTech, the Holographic Display Sight (HDS), as the name implies, displays holographic patterns, which have been designed for instant target acquisition under any lighting situations, without covering or obscuring the point of aim. The holographic reticle can be seen through the sight, providing the operator with a large view of the target or zone of engagement. Unlike other optics, the SU-231/PEQ is passive and gives off no telltale signature. The heads up, rectangular, full view of the HDS eliminates any blind spots, constricted vision, or tunnel vision normally associated with cylindrical sights. With both eyes open, the operator sights in on the target for true two-eyed operation.

The wide field of view of the SU-231/PEQ allows the operator to sight-in on the target/target area while maintaining peripheral viewing through the sight if needed, up to thirty-five degrees off axis. A unique feature

The SU-231 sight is the SOCOM-issued sight of choice for close quarters battle. The sight employs a true heads-up display that eliminates blind spots, constricted vision, and tunnel vision; true, two-eyes-open shooting is realized. Maximizing the operator's peripheral vision, and ultimately gaining greater control of the engagement zone, achieve instant threat identification. The heads-up display is constructed with a three-layer, shatterproof laminate glass that is 1/4-inch thick for added durability. Additional protection is provided by a "roll bar" ruggedized hood. MARSOC

Elcan SU-230 PVS, manufactured by Raytheon, is a switchable one power to four power dual-field-of-view (DFOV) combat optic. Using the Elcan, the operator does not have to replace optics for up close to distance shooting. With the flip of a switch the Marine can go from 1x, both eyes open, close quarters battle shooting, to 4x magnification for accurate long-range engagements, often a critical issue when operating in an urban environment.



of the HDS is the fact that it works if the heads-up display window is obstructed by mud, snow, etc. Even if the laminated window is shattered, the sight remains fully operational, with the point of aim/impact being maintained. Since many MSOT missions favor the night, it can be used in conjunction with NVG/NVD. The hallmarks of the HDS are speed and ease of use, equating incredible accuracy and instant sight-on-target operation, which can be the difference between life and death in CQB operations.

The key attribute of the HDS is extremely fast reticle-to-target acquisition in multiple target situations, and in conditions in which either the operator or the threat(s) are moving rapidly. As quickly as the eyes acquire the target, the holographic reticle can be locked onto the threat(s). When firing a weapon using the HDS, one eye maintains focus on the target while the other eye's natural instinctive reaction places the holographic reticle on the target. The result is an instant acquisition of the target for immediate and precise shot placement without covering or obscuring the point of aim. Whether engaging a target straight on, around corners or physical obstacles, or in awkward shooting positions, the HDS makes it easy for the operator to achieve rapid reticle to target lock-on. Pure and simple, the HDS locks onto the target as fast as your eyes do.

Marines take aim with their M4A1 carbines during training. The Marines' M4s are fitted with Trijicon ACOG sights. US NAVY PHOTO, MC1 TROY LATHAM

## AN/PVQ-31B ACOG

The ACOG (advance combat optical gunsight), manufactured by Trijicon, is the day optical scope for the SOPMOD kit. The ACOG is a four-power telescopic sight, including a ballistic-compensating reticle. Utilizing this reticle provides increased capability to direct, identify, and hit targets to the M4A1 carbine's maximum effective range (600 meters). The sight's chevron reticle pattern provides target recognition and stand-off attack advantage while retaining a close quarters capability equivalent to the standard iron sights. The ACOG does not require any batteries.

## SU-230 PVS

Another passive daylight aiming system is the Raytheon Elcan Spectre DR. Its official nomenclature is the SU-230 PVS, though the MARSOC Leathernecks simply call it the "Elcan." The SU-230 is a dual-role optical sight that incorporates both the 1x and 4x dual-field-of-view

(DFOV) in one combat optic. This switchable sight allows the operator to transition from CQB to longer range by simply throwing a lever. This will change the optic from a one power to a magnified four-power sight. The sight is designed to optimize the optical path and identical eye relief in either 1x or 4x modes. The Elcan may be used with an illuminated reticle or merely as a red dot sight. In addition to day operation, the SU-230 allows the operator to easily clip on a night vision device in front of the optic.

## AN/PVS-14

The AN/PVS-14D night vision device is the optimum night vision monocular ensemble for special applications. The monocular, or pocketscope, can be handheld or placed on a face mask, helmet mounted, or attached to a weapon. The PVS-14D night vision monocular offers state-of-the-art capability in a package that meets the rigorous demands of the U.S. Special Operations forces. The monocular configuration is important to shooters who want to operate with night vision while maintaining dark adaptation in the opposite eye. The head mount assembly, a standard in the kit, facilitates hands-free operation, when helmet wear is not required. The weapon mount allows for use in a variety of applications, from using iron sights to coupling with a red dot or tritium sighting system, such as Trijicon ACOG system and EOTech HDS. A compass is available to allow the user to view the bearing in the night vision image.

Recently introduced and being evaluated is a modified PVS-14, called the AN/PSQ-20 enhanced night vision goggle (ENVG). This updated version incorporates a thermal imager into the device. The Marines will not only be able to see the enemy in the dark, but with its thermal capability, the AN/PSQ-20 ENVG will enable them to identify the heat signature of individuals and vehicles in all weather conditions, as well as degraded battlefield environments.

AN/PVS-14 night vision monocular may be handheld, worn on a head mount assembly, mounted on the MICH helmet, or can be mounted directly on the operator's weapon. One of the primary benefits of the PVS-14 is the fact that since it covers only one eye, the operator will have "night vision" in one eye and ambient night sight in the other. It also can be fitted on the rail system of the M4A1, providing the operator with precision aimed firing in the dark.

The AN/PVs-17 night vision sight is a replacement for the PVS-14. This sight incorporates the new Gen III image intensification I2 tube. It has a mounting attachment to interface with the Mil. Std. 1913 rail adaptor system (RAS). The system weighs less than two pounds, contains a mil-dot reticle, and can be configured for either 2.25x or 4.5x magnification.

## AN/PVS-15

The AN/PVS-15 night vision device is a lightweight, self-contained Generation III twin-tube goggle system that offers the operator better depth perception than single tube systems. The PVS-15 provides similar performance characteristics as found in the AN/AVS-6 aviator's night vision imaging system (ANVIS). The AN/PVS-15 can be operated as a handheld binocular or mounted to the helmet. The AN/PVS-15 was designed specifically for times when critical mission performance and depth perception factors are required elements. The PVS-15 is powered by one AA battery and is submersible down to sixty-six feet.

## AN/PVS-17

The AN/PVS-17 night vision device is a lightweight, compact, night vision sight that provides the operator the capability to locate, identify, and engage targets from twenty to three hundred meters. The MNVS features a wide field-of-view, magnified night vision image, illuminated reticle, adjustable for windage/elevation. It can be handheld or mounted on the weapon.

## AN/PAS-13 (V2)

The AN/PAS-13 (V2) thermal weapons sight (TWS) is capable of detecting targets in total darkness, in adverse weather, and through other combat environment obscurities, such as dust and smoke. Placing one's eye on the sight and applying slight pressure activates the TWS, enabling the operator to detect personnel out to 1.5 kilometers and vehicles out to 4.2 kilometers. The TWS requires no visible light source to operate and can be used either as a weapon-mounted sight or handheld imager. The AN/PAS-13 IR sensor receives infrared light, which in turn converts it into digital data. It is then processed and displayed digitally as an infrared image for the operator.

The AN/PAS-13 (V2) thermal weapons sight is capable of detecting targets in total darkness, in adverse weather, and through other combat environment obscurities, such as dust and smoke.

ABOVE: The AN/PVS-24, by Insight, is a clip-on night vision device that attaches to the rail system in front of the day optic. The device can quickly be mounted to the weapon without any shift in BZO (battlefield zero). This night operating device allows the Marine to observe and identify targets in adverse conditions, including rain, smoke, and snow, from low light to total darkness. Using the Gen III image tube, the device can identify targets out to six hundred meters, with the mere illumination of a quarter moon.

OPPOSITE: The Surefire M900 combines a vertical foregrip and an integral weapon light with four types of switches: a momentary-on pressure pad, a rotary constant-on switch, a system disable switch, and a momentary-on thumb switch.

## AN/PEQ-15

The advanced target pointer illuminator aiming light (ITPIAL) allows the M4A1 to be effectively employed at distances of up to three hundred meters with standard-issue night vision goggles (NVG) or a weapon-mounted night vision device (i.e., AN/PVS-14). It is designed to be used with or without NVGs to engage the enemy. The IR illuminator broadens the NVG's capabilities in buildings, tunnels, jungle, overcast, and other low-light conditions in which starlight would not be sufficient to support night vision, and allows visibility in areas normally in shadow. The PEQ-15 coaligned visible and IR aiming laser combines with an adjustable and focusable IR illuminator. This combination provides the operator a decisive advantage over an opposing force with little or no night vision capability. The AN/PEQ-15, which is 50 percent smaller, replaces both the AN/PEQ-2 IR illuminator/aiming laser and the AN/PAQ-4C.

## Surefire M900

The Surefire M900 is a combination vertical foregrip and integral weapon light built into one accessory. The M900 attaches to the underside of the RAS to provide the operator additional weapon control and a blazing white prefocused incandescent beam of white light. The M900 attaches to the Picatinny rail system with an ARMS M93 quick-release throw lever mount that secures the light and grip, while the M910A model attaches via a set of thumbscrews.

The weapon light features four types of switches: momentary-on pressure pads (one on each side of the grip for ambidextrous operation) that activate the main light, a rotary constant-on switch for the main light, a system disable switch to shut down the entire unit, and a momentary-on thumb switch that controls two low-output LEDs. These LEDs are available in red, white, and blue—ideal for low-signature navigation. There is an optional KT4 conversion kit that replaces the M900A's 1.62-inch

The AN/PEQ-15 advanced target pointer illuminator aiming light boosts the M4A1's range to three hundred meters with night vision devices. Smaller than previous models, it allows room for other add-ons, such as the Surefire visible flashlight shown here.

-diameter head with a 2.5-inch-diameter head that produces a narrow, farther-reaching beam. The white light is bright enough to temporarily blind the night-adapted vision of an enemy combatant. The MN10 lamp assembly is rated at 125 lumens for sixty minutes.

Also available is an ultra high-output MN11 assembly rated at 225 lumens for twenty minutes. Like all Surefire lights, it is built like a tank, constructed of nonconductive Nitrolon with shock-isolated aluminum bezel. The M900A is powered by three Surefire lithium SF123A batteries that fit into the grip.

## OTHER ACCESSORIES

### Back-up Iron Sights (BIS)

The Back-up Iron Sight (BIS) provides the aiming ability similar to the standard iron sight on the carbine to three hundred meters. The BIS may be used in conjunction with the Aimpoint sights, and folds out of the way to allow the day optical scope or Reflex sight and night vision device to be mounted on the M4A1 carbine. In the event the optical scopes are damaged or otherwise rendered inoperable, they can be removed and the BIS will then be used to complete the mission. The sight can also be used to bore sight or confirm zero on the Reflex sight or visible laser.

### Forward Handgrip

The forward or vertical handgrip, unofficially referred to as "the broom handle," attaches to the bottom of the RAS and provides added support, giving the operator a more stable firing platform. It can be used as a monopod in a supported position and allows the operator to hold the weapon despite overheating. The forward handgrip was designed for the shooter to push against the assault sling and stabilize the weapon with isometric tension during CQB; holding the weapon in this manner brings the shooter's elbows in closer or tighter to his body, consequently keeping the weapon in front of the operator, providing added support. Some of the Marines like the option; others commented they prefer using the carbine in the manner they were taught, sans the handgrip. Another preference is a modified hold that combines the more traditional handhold while pressing the heel of the supporting hand against the handgrip; this method provides a more natural stance and in turn a more stable firing platform. The forward handgrip also serves to keep the operator's hands from the handguards and barrel, which become hot during use. One of the drawbacks of the vertical grip is the possibility of the grip catching on a ledge or edge of the helicopter during egress or extraction. This issue is being addressed by the evaluation of a quick-release lever on the forward grip.

The forward handgrip is intended to mount near the center, just rear of center on the bottom rail. The forward handgrip provides added support and control for full auto and rapid firing. It allows for quicker handling when additional components are attached to the weapon. The forward handgrip can also be used as a monopod in a supporting position and allows the operator to hold the weapon despite overheating. The handgrip allows for quicker handling when the additional components have been attached to the weapon, thus providing more precise target acquisition. There are cases when the forward handgrip is necessary. One SOF master sergeant related, "Some operators end up putting so many of the [SOPMOD] accessories on the carbine, that they *have* to use the vertical grip 'cause there just isn't anywhere else to hold it!"

The Grip Pod System is an innovative vertical foregrip with a strong and stable bipod integrated into the grip. With the simple push of a button, the Grip Pod's legs instantly deploy. This unique combination combines both a vertical foregrip and bipod in a seven-ounce package. Using the Grip Pod System, the operator can go from a CQB position to prone and have a stable base for aimed firing in place before hitting the ground. It mounts to the RAS via thumbscrew and does not have a quick-release option.

Worth noting in real-world lessons learned, one of the problems encountered by soldiers in the sandbox is the pressure pad, which is most often positioned on the vertical grip (e.g., Surefire or other VFG with pressure-pad cutout). During a mission, an operator could be

A Marine with a company from 2nd MSOB fires on his target while conducting shooting drills as part of the Dynamic Assault package at the Washoe County Regional Shooting Facility, Nevada. MSOB members participated in the exercise as part of their Marine special operations companies' deployment for training (DFT). His M4A1 is fitted with a Grip-Pod forward handgrip, SU-231 sight, PEQ 15, and an Insight M3X 1913 long gun visible light. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

With the quick attach/detach sound suppressor kit MK 4 Mod 0 (QAD suppressor) in place, the report of the weapon is reduced by a minimum of 28 decibels (dB). The suppressor also reduces muzzle flash and blast substantially.

moving up an alley during a MOUT (military operations on urban terrain) operation. They are wearing NVG and moving stealthily. Without warning, the soldier trips over debris on the street, reflexively squeezes the pressure pad, and has an accidental discharge of the white light, thus giving away his position to any enemy insurgent nearby. For this reason, several of the operators have reverted back to running their white lights with the rear thumb push button.

## Quick Attach Suppressor

The quick attach/detach sound suppressor can quickly be emplaced or removed from the M4A1 carbine. It measures 6.6 inches, has a diameter of 1.5 inches, and weighs less than two pounds. With the suppressor in place, the report of the weapon is reduced by a minimum of 28 decibels (dB). As the 5.56mm round is supersonic, you will hear the bang, but it is more like a .22-caliber pistol than a 5.56mm round. With the suppressor attached, it buys some time while the bad guys are trying to figure out: What was that? Where did it come from? By the time they figure out what is going on, the assault team should be in control of the situation. The suppressor will also keep the muzzle blast to a minimum, assisting the entry team in situation awareness. While the suppressor does not completely eliminate the sound, it does reduce the firing signature (i.e., the flash and muzzle blasts). Using the suppressor is effective as a deceptive measure, interfering with the enemy's ability to locate the shooter and take immediate action. Additionally, it reduces the need for hearing protection during CQB engagements, thus improving interteam voice communication.

## Combat Sling

The combat sling affords a hassle-free, immediate, and secure technique of carrying the M4A1 carbine, especially when equipped with assorted accessories from the kit. The combat sling can be used alone or with the mounting hardware to provide safe and ready cross-body carry or a patrol carry. Whether moving in close quarters in a close

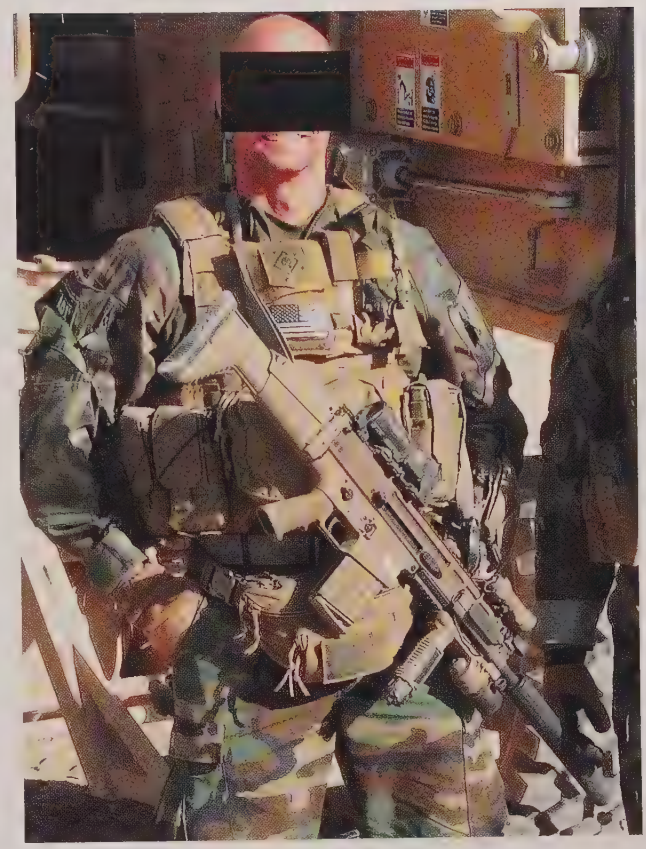
column formation or stack, the muzzle of the weapon is kept under control and does not sweep the operator or his teammates around him. The weapon is carried in a ready position to immediately engage hostile targets. Although issued with the SOPMOD kit, various commercial manufacturers produce similar weapon slings, as well as those worked up by the company riggers, which have also found their way into the kit bags of the Marines. While there are a number of varieties of slings available, most fall into two camps single point and double point. The single-point sling provides the shooter with faster transition between shooting sides, where the two-point system is favored when the weapon must be in the carry position, such as in fast-roping or rappelling. One Marine commented, "The single point is fast, but make sure you are wearing a cup!"

## Special Operations Forces Combat Assault Rifle (SCAR)

The Special Operations Forces Combat Assault Rifle (SCAR) is a modular assault rifle designed from the ground up, with input from U.S. Special Operations Forces. Designed by FN Herstal (FNH) Group headquartered in Liège, Belgium, the SCAR is manufactured at the FN Manufacturing LLC plant in Columbia, South Carolina.

The SCAR system includes the MK 16 Mod 0 (SCAR-Light) chambered in 5.56mm, MK 17 Mod 0 (SCAR-Heavy) chambered for 7.62mm, and an enhanced grenade launcher module (EGLM), which will be able to fire airburst munitions as well as standard 40mm high-explosive dual-purpose ammunition. There is a 90 percent commonality between the two SCAR versions. The SCAR-L and SCAR-H utilize all of the accessories of the SOPMOD kit (i.e., sights, lasers, scopes, etc.). To accommodate the assortment of SOPMOD accessories, the SCAR has multiple Picatinny Mil. Std. 1913 rails at three, six, nine, and twelve o'clock positions, providing the operators with multiple configurations.

The SCAR weapons employ a short-stroke, gas-piston system, eliminating the gas direct system of the M16/M4 family. This provides a more reliable weapon that does not heat up the rail system. The buttstock features a folding telescoping stock, as well as check height adjustment. This



The MK 17 SCAR-H is a selective fire, semiauto or fully auto weapon chambered for 7.62mm ammunition, in use with MARSOC in support of Operation Enduring Freedom. This Marine has fitted the weapon with an Elcan 1x-4x sight, AN/PEQ-15 ATPIAL, and Surefire M900 vertical foregrip weapon light and an Insight visible light. The collapsible stock of the SCAR can be adjusted to six positions, as well as being able to fold to the side. MARSOC

allows the operator to set the proper eye alignment to the assortment of SOPMOD optics. Both SCAR models feature three interchangeable variable-length barrels: for CQB, standard, and sniper variant. This feature was envisaged to allow the operators to fine-tune his weapon based on mission parameters.

To complement the SCAR is the MK 13 enhanced grenade launcher module (EGLM) that replaces the M203 grenade launcher. The 40mm EGLM features a left- or right-hand side opening breech to facilitate the loading of longer munitions. The EGLM includes a 40mm weapon module, Fired Control Unit I (mechanical with integrated laser/MRD sight). The launcher can be used independently or mounted onto the weapon, in similar fashion as the M203.

In August 2010 SOCOM announced it was cancelling any further acquisitions of the MK 16 version of the SCAR. However, current plans are in place to still procure the MK 17 and the MK 13 EGLM. The MK 17 is currently in use with MARSOC Marines downrange.

## M1911

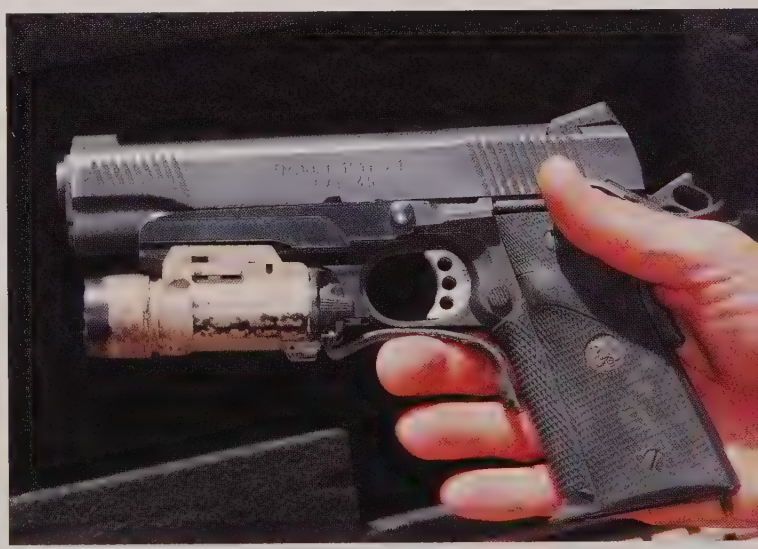
This weapon is a modified M1911A1 .45-caliber pistol, sometimes referred to as "near match" or "combat accuratized." The Marines of MARSOC use what was formerly called the MEU (SOC) pistol, based on the Springfield Armory platform. With an effective range of fifty meters, this semiautomatic pistol is the designated "backup" or secondary weapon of Marines in CQB operations. Worth noting, while it is considered a secondary weapon, there are times when it would be the weapon of choice due to confined space, concealment, or other mission-dependent parameters. The M1911A1 was chosen for this role (and its modifications generated) because of its inherent reliability and lethality, and because the MEU (SOC) modifications make the M1911A1 design more "user friendly." It is reported that Col. Robert Coates, USMC commander, Det One, made the comment: "The 1911 was the design given by God to us through John M. Browning that represents the epitome of what a killing tool needs to be. It was true in 1911 and is true now."

For many decades, the Colt M1911A1 .45 ACP had been the standard handgun issued to Marines and Special Operations. With more stopping power than the 9mm Parabellum, the M1911A1 is the handgun by which all other U.S. pistols are judged. Respected for its field reliability, the single action .45's outstanding characteristics includes competition grade ambidextrous safety, precision barrel, precise trigger, rubber combat grips, Novak three-dot tritium night sights, rounded hammer spur, and an extra-wide grip safety for increased controllability. Each M1911A1 is hand-built by specialists at the Rifle Team Equipment (RTE) shop in Quantico, Virginia.

The unique characteristics of the MEU (SOC) .45 pistol are U.S. GI frame from such manufacturers as Colt, Remington Rand, Ithaca, or US&S; commercial slide from either Springfield Armory or Caspian Arms; custom-made sights by PWS; and barrel and bushing by Bar-Sto. Bar-Sto barrels have been used exclusively by the U.S. Marine Corps Marksman Unit since 1977. All barrels have a rate of twist of one turn in sixteen inches, resulting in an accuracy of two inches max at twenty-five yards using match grade ammo.

An MK 17 SCAR with the enhanced grenade launcher module single-shot, pump-action 40mm grenade launcher attached. The EGLM can be mounted beneath either of the SCAR variants (MK 16 or MK 17), or with the addition of a separate adjustable stock, the launcher can be used as a stand-alone weapon, akin to the M79. FN HERSTAL PHOTO

The M1911 is a combat accuratized modified MEU (SOC) M1911A1 .45-caliber pistol. Each pistol is hand-built by specially trained armorers at Quantico, Virginia. The base weapon is upgraded and customized until it is a match grade precision handgun. The operator carries it as a backup or secondary weapon, depending on the mission.



M1911 fitted with a Surefire X300 visible light. MARSOC is currently looking at upgrading the MEU (SOC) .45 to the M45 close quarters battle pistol. Worth noting is that the parameters for the new M45 closely mimic the M1911, including its .45 caliber; you do not fool around with perfection.

The pistol features a King's Gun Works extra-wide grip safety for increased comfort and controllability (which aids in a quick follow-up second shot) and ambidextrous thumb safety lock; it also has a Videki long aluminum trigger, Pachmayr rubber wraparound grip panels, and high-profile combat sights.

The issue magazines are replaced with Wilson Combat stainless steel, seven-round competition-grade magazines with rounded plastic follower and extended floor plate. The weapon modifications were designed in 1986 to meet the requirements of the MEU (SOC). Each pistol is hand-built by specially trained armorers at the RTE shop in Quantico, Virginia. Recent modifications in testing at the Marine Corps Systems Command, Raids and Recon in Quantico, Virginia, have been the addition of a small bracket beneath the barrel on the receiver, which allows the attaching of a visible light or laser aiming device.

## M9 Beretta

Since 1985, the M9 has seen service as the standard-issue side arm for U.S. troops, both conventional and special operations forces: in Operation Urgent Fury in Grenada, Operation Desert Shield/Storm in Kuwait, Operation Restore Hope in Somalia, service with IFOR in Bosnia and KFOR in Kosovo, and now in GWOT operations. Along with the standardization of the 9mm round, the M9 brought the armed forces a larger capacity magazine. The M9 holds fifteen rounds compared to the Colt 1911's seven or eight rounds. Although the 9mm ammunition is lighter and smaller than .45 ammo, it was viewed that it was adequate for line troops. This trade-off also allowed the troops to engage more rounds in a fire fight before needing to reload. The slide is open for nearly the entire length of the barrel. This facilitates the ejection of spent shells and virtually eliminates stoppages. The open slide configuration also provides a means for the pistol to be loaded manually. Worth noting is the fact that conventional troops in general, and SOF units in particular, have voiced their dislike of the lightweight 9mm round, preferring the heavier .45-caliber ammunition. Only two units of the U.S. armed forces did not adopt the M9: Marine Force Recon companies and Delta Force.

## M249SPW

The M249 special purpose weapon (SPW), which is commonly known as the Para SAW, was developed by FN Herstal to meet the requirement for a lightweight variant of the standard M249 squad automatic weapon while retaining the intrinsic functionality and reliability of the weapon. The modification resulted in a reduction in weight of 4.1 pounds, as well as a new shortened, lightweight barrel of 13.5 inches. The weapon is an individually portable, gas-operated, magazine or disintegrating metallic link-belt fed, light machine gun with fixed headspace and quick-change barrel feature. The M249SPW can engage point targets out to eight hundred meters, firing the improved NATO standard 5.56mm cartridge. The SAW forms the basis of firepower for the fire team. The gunner has the option of using thirty-round M16 magazines or linked ammunition from preloaded two-hundred-round plastic magazines. The gunner's basic

A MARSOC instructor takes aim with the M9 Beretta, firing at multiple targets during a timed shoot. Since 1985, the M9 has been the standard-issue side arm of the U.S. military. USMC PHOTO, LANCE CPL. JOSEPH STAHLMAN

The M249 Para SAW has been modified with the rail attachment system allowing the attachment of SOPMOD kit accessories, such as optical sights, night vision devices, laser designators, IR aiming devices, flashlights, and a forward pistol grip or bipod. The Para SAW is an air-cooled, belt-fed, gas-operated automatic weapon that fires from the open-bolt position. It has a cyclic rate of 750 rounds per minute (rpm). This M249 is fitted with an SU-231 sight and EOTech three-power magnifier. It is loaded with a 100-round magazine, which is often referred to as the "nut sack."

load is six hundred rounds of linked ammunition. The weapon weighs in at 19.30 pounds with a loaded two hundred-round linked ammunition magazine. Overall length is 35.75 inches, buttstock extended, and 30.50 inches with the buttstock retracted.

The Marines are evaluating the Heckler and Koch infantry automatic rifle (IAR) as a possible replacement for the M249. The M27 IAR weighs in at eight pounds when empty and eleven pounds when loaded with a thirty-round magazine. The M27 is a gas-piston system that fires from a closed-bolt position, and like the M249, it is chambered for 5.56mm NATO ammunition, making the weapon compatible with the M4A1 carbine. According to the Marine Corps System Command in Quantico, Virginia, the Corps is pursuing a high-capacity magazine that would carry fifty to one hundred rounds. Commandant General James Conway has voiced reservations regarding replacing the SAW, stating: "The M249 allows Marines to establish fire superiority in a firefight, forcing attackers to take cover. I'm going to be hard-pressed to get fire superiority over him, to keep his head down instead of him keeping mine down, because that two-hundred-round magazine just keeps on giving."

## M240G Medium Machine Gun

In an effort to replace their aging stock of 7.62mm machine guns, the U.S. Marines selected the M240G medium machine gun as a replacement for the venerable Vietnam-era M60 family of machine guns. Manufactured by Fabrique Nationale, the 24.2-pound M240G medium machine gun is a gas-operated, air-cooled, link-belt fed weapon that fires the 7.62mm round. The weapon fires from an open-bolt position, with a maximum effective range of 3,725 meters. The cyclic rate of fire is 750 rounds per minute (low rate) and 950 rpm (high rate) through an adjustable gas regulator.

It features a folding bipod that attaches to the receiver, a quick-change barrel assembly, a feed cover and bolt assembly that enables closure of the cover regardless of bolt position, a plastic buttstock, and an integral optical sight rail. While it possesses many of the same characteristics as the older M60, the durability of the M240 system results in superior reliability and maintainability.

The M240G in use with MARSOC has been modified for ground use by the installation of a flash suppressor, front sight, carrying handle for the barrel, a buttstock, infantry length pistol grip, bipod, and rear sight assembly.

## MK 48 Mod 1

In-theater MARSOC Marines also have access to the MK 48 Mod 1, which is a lightweight version of the M240. The FN Herstal MK 48 is essentially an M249 scaled up to accept 7.62mm ammunition. MK 48 light machine gun features a Mil. Std. 1913 rail at three, six, and nine o'clock positions, which allows for the attachment of SOPMOD accessories, such as optical sights, night vision devices, laser designators, IR aiming devices, flashlights, and a forward pistol grip or bipod. Weighing 18.26 pounds (empty), it fires the NATO standard disintegrating link-belt fed ammunition, with a cyclic rate of 750 rounds per minute.

## M40A3 Sniper Rifle

In 1996, the USMC armorers at Precision Weapons Section at MCB Quantico, Virginia, began to design the replacement for the M40A1. The result was the M40A3, introduced to the Corps in 2001. It uses a Remington 700 short action, chambered for 7.62mm NATO, with a steel floorplate assembly and trigger guard built by D. D. Ross; with latter versions being replaced with Badger Ordnance hardware. The barrel is a Schneider match grade SS #7, with

OPPOSITE: A member of Marine Special Operations Company, 2nd Marine Special Operations Battalion practices high-angle fire, shooting an M240G at targets in the valley below him at the Rocket Mountain training range in Hawthorne, Nevada, in April 2009. The M240G machine gun is a 7.62mm medium class weapon manufactured by Fabrique Nationale that has been adapted from the M240/M240E1, which is a coaxial/pintle mounted machine gun for tanks and light armored vehicles. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

ABOVE: The MK 48 Mod 1 is a 7.62mm version of the MK 46, a variant of the M249SPW. The MK 48 has the versatility of the Para SAW but fires hard-hitting 7.62mm ammunition. FN HERSTAL PHOTO

a 1:12 twist and is twenty-four inches in length. The Unertl rings and bases have been replaced with Badger Ordnance steel rings. The rifles also come with a Harris bipod and an accessory rail, also built by G&G Machine. The fiberglass stock is a new McMillan Tactical A4, with adjustable cheek and length of pull.

The M40A3 is extremely accurate, designed for one-half minute of angle (MOA) with match ammunition. It is very rugged and was designed from the ground up to be a superb sniper rifle. Combined with the new M118LR ammo, it makes a system that is ranked with the best in the world. The rifle's magazine capacity is five rounds, with an effective range of one thousand yards.

### M40A5 Sniper Rifle

The newest model in the M40 series of Marine Corps sniper rifles is the M40A5. It carries over many of the M40A3 specifications and maintains a two pound trigger pull. Like the M40A3 it is fitted with MilStd 1913 forward accessory rail and equipped with Badger Ordnance 34mm steel rings for mounting a scope. The updated and modified version features a threaded barrel tip for a Surefire muzzle break. This allows the shooter to attach a sound suppressor to the weapon.

### M14/M14 Designated Marksman Rifle (DMR)

The M14 rifle was the American armed forces standard service rifle until the late 1960s when it was replaced by the M16A1. Although the M14 was replaced more than fifty years ago during the Vietnam War, it has enjoyed a resurgence among the U.S. military. One reason was that special operations teams needed to engage the enemy beyond the effective range of the M16 and now the M4A1 carbine. The M14 is a gas-operated, shoulder-fired weapon, firing a 7.62mm round from a twenty-round magazine. The rifle is capable of semiautomatic and fully automatic fire via a selector located on the right side of the weapon.

The M40A3 USMC sniper rifle is extremely accurate, very rugged, and was designed from the ground up by USMC armorers at Quantico, Virginia. The Marine in the background is firing an M40A3, while the shooter in the foreground is firing an M39 enhanced marksmanship rifle.

The rifle weighs in at eleven pounds with full magazine and sling. Its cyclic rate of fire is 750-rpm with an effective range of four hundred meters.

The DMR is a precision grade, 7.62mm, semiautomatic rifle. It is equipped with a simple mounting system that will accommodate a day optical sighting scope, the AN/PVS-4 Starlight Scope, and other night/low-level target engagement equipment. The DMR also features an operator attachable flash suppressor and uses both ten- and twenty-round magazines. The "basic" DMR (i.e., less sight, magazine, sling, basic-issue items, cleaning gear, suppressor, and bipod) weighs approximately eleven pounds. MARSOC operators, as well as Marine scout/sniper teams, use the DMR when they expect to need a rifle capable of delivering rapid, accurate fire against multiple targets at ranges out to eight hundred meters and with greater lethality than the M16A2 or M4A1 carbine.

### M39 Enhanced Marksman Rifle

The M39 enhanced marksman rifle (EMR) is a semiautomatic, gas-operated rifle chambered for the 7.62x51mm NATO cartridge. It is a modified and accurized version of the M14 rifle modified by armorers at Quantico, Virginia, for Marine Corps use. It is based on the current designated marksman rifle (DMR), which it is now replacing.

The EMR is primarily used by Marine infantry by designated marksman to provide precision fire for units that do not rate a scout sniper. As a replacement for the DMR, the EMR fills the need for a lightweight, accurate weapon system utilizing a cartridge more powerful than the M16A4's standard 5.56x45mm NATO—the 7.62x51mm NATO. The EMR is also used by Marine scout snipers when the mission requires rapid accurate fire, and by Marine Corps explosive ordnance disposal teams.

A sniper and his spotter prepare a shot while taking the Mountain Scout Sniper Course at Marine Corps Mountain Warfare Training Center in Bridgeport, California. The M40A5 has been the official USMC sniper rifle since 2009. USMC PHOTO, LANCE CPL. SARAH ANDERSON

A MARSOC Marine armed with an M14 designated marksman rifle (DMR) patrols a village in Helmand province, Afghanistan, looking for Taliban fighters who attacked the MSOC unit and Afghan National Army. In addition to the "knock down" characteristics of the ammo used by the M14 DMR, the 7.62mm projectile has the ability to turn insurgent cover into mere concealment. USMC PHOTO, STAFF SGT. LUIS P. VALDESPINO JR.

## MK 11 Mod 0

The 7.62mm MK 11 Mod 0 type rifle system is manufactured by Knight Manufacturing Company in Florida, and is a highly accurate, precision semiautomatic sniper rifle chamber capable of delivering its 7.62mm round well out to one thousand yards. With a half-inch MOA accuracy, the MK 11 has won acceptance in the SOF community as one of the finest semiautomatic sniper rifles in the world. The MK 11 is based on the original SR-25. This rifle appears to be an M16 on steroids. In fact, 60 percent of the parts are common with the M16 family. If an operator is familiar with the M16 or M4A1, his hands will naturally fall in place on the MK 11. From the pistol grip to the safety switch or magazine release, if you've handled an M16, you already know how to operate the MK 11. The result of this replication is a rifle that is quicker to assimilate, easier to maintain, and more seamless in transition than any other semiautomatic 7.62mm rifle in the world.

Similar to the M4A1, the MK 11 has two main sections: the upper and lower receiver. This allows for cleaning in the same manner that the troops have been familiar with since basic training. Another benefit of the receiver's breakdown is the fact that the rifle may be transported in a smaller package for clandestine activities. Once on target, the rifle is merely reassembled with no effect on the zero of the optics.

The MK 11 Mod 0 system includes a free-floating twenty-inch barrel, as well as a free-floating rail adapter system (RAS). The RAS is similar to the RIS on the M4A1. Another feature of the MK 11 is the ability to mount a sound suppresser. The muzzle blast becomes negligible and the only sound here is the sonic crack of the round going downrange.

## M107 .50-Caliber Special Application Scoped Rifle (SASR)

The M107 is a semiautomatic, air-cooled, box magazine-fed rifle chambered for the .50-caliber, M2 Browning machine gun cartridge. Barrett Firearms Manufacturing of Murfreesboro, Tennessee, manufactures the weapon.

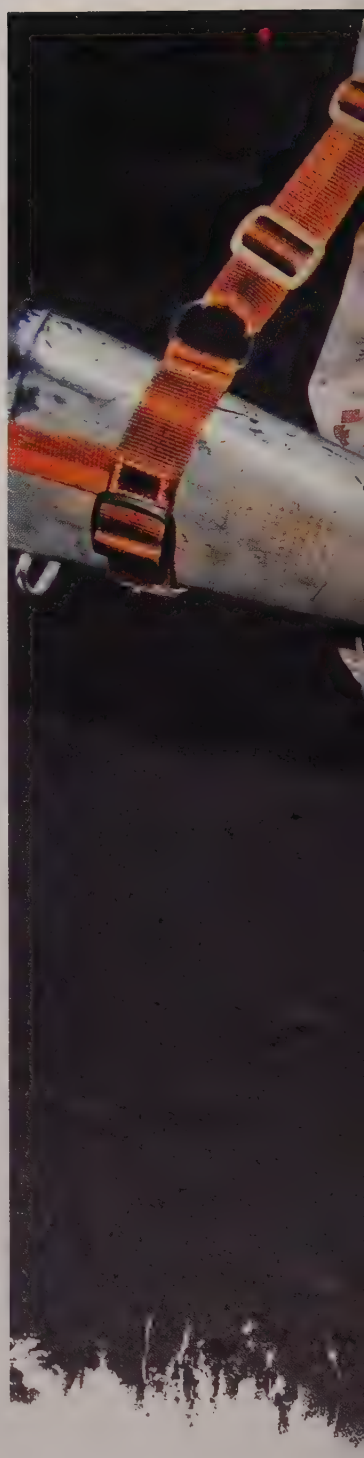
A MARSOC Marine fires his M39 enhanced marksman rifle (EMR) at targets in the valley below during training at the Rocket Mountain range southeast of Carson City, Nevada. USMC PHOTO, LANCE CPL. STEPHEN BENSON

This rifle operates by means of the short recoil principle. It features a twenty-nine-inch, free-floating fluted barrel, with a 1:15 right-hand twist.

The barrel is attached to a double spring yoke; this unique system provides the large weapon with an additional source of assistance as the barrel slides in and out, spreading the recoil throughout the weapon. This system, in addition to the standard buffer and spring arrangement in the lower receiver, prevents the shooter from getting slammed by heavy recoil with each shot. Any recoil energy that remains is softened by a thick rubber recoil pad.

The M107 is no small weapon, coming in at fifty-seven inches in length and weighing thirty pounds empty. A hefty box magazine holding ten rounds of M33 FMJ (full metal jacket), 661 grain, .50-caliber Browning machine gun (BMG) ammunition feeds the large rifle. The effective range of the M33 is two thousand yards. The standard .50-caliber BMG round has a muzzle velocity of 2,850 fps and will fire out to 6,800 yards. That is equivalent to sixty-eight football fields, laid end to end.

The pistol grip and fire/safe lever of the M107 is identical to those found on the M16/M4 rifles. Any shooter familiar



A Marine special operator fires his .50-caliber M107 special application scoped rifle (SASR) at targets in the valley below him during training at the Rocket Mountain firing range. With the M107, a well-trained marksman can effectively engage targets more than a mile away. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

Knight Armament Company's 7.62mm MK 11 Mod 0 evolved from the SR-25, a sniper rifle designed by the father of the AR15/M16, Eugene Stoner. The weapon is capable of shooting sub-MOA accuracy while engaging multiple targets. The MK 11 couples the accuracy of a bolt rifle with a semiautomatic rifle's capability of a quick follow-up shot. The MK 11 looks like an M16 and shares 60 percent of its parts with its "little brother." Note the PEQ-15 laser targeting device mounted on the rifle near the operator's left hand.

Mounted in the cupola of a GMV-M (Ground Mobility Vehicle, Marine) is an M2 .50-caliber Browning machine gun (BMG). Referred to as "the fifty" or "Ma Deuce," this heavy machine gun has been in service since World War II and continues in use around the world, including current combat operations in Afghanistan and Iraq. It is capable of taking out soft-skinned and lightly armored vehicles. The M2 can also wreak havoc on bunkers, buildings, and any insurgent occupants therein. It has a maximum effective range of two thousand meters, though it will reach out well past six kilometers.

with these military weapons, or even the AR-15 style of rifle, will feel right at home with the shooting configuration of this semiautomatic Barrett rifle.

The system comes packed in a watertight, airtight Pelican carrying case, allowing the weapon to be carried through or under the water. The basic M107 rifle is equipped with bipod, muzzle brake, carrying handle, metallic sights, and ten-round box magazine.

## M2 .50-caliber Machine Gun

The Browning M2 .50-caliber machine gun has been serving the American soldiers since the late 1920s. Referred to as the "Ma Deuce" or simply the "fifty-cal," this heavy machine gun will definitely put "the fear of God" into any enemy. The M2 .50-caliber machine gun, heavy barrel, is a crew-served, automatic, recoil-operated, air-cooled machine gun. The M2 uses disintegrating metallic link-belt fed ammunition, and may be feed from either side by reconfiguring some of the component parts.

This gun has a back plate with spade grips, trigger, and bolt latch release. It may be mounted on most vehicles as an antipersonnel and antiaircraft weapon. The M2 is equipped with leaf-type rear sight, flash suppressor, and a spare barrel assembly. Associated components are the M63 antiaircraft mount and the M3 tripod, which is used for ground mounting. The weapon is rather large with a length of sixty-two inches and weight of eighty-four pounds. It has an effective range of two thousand meters, with a maximum range of over four miles. It has a cyclic rate of 450 rounds per minute.

Originally designed by John Browning toward the end of World War I, the M2 first saw combat in World War II, and continues as the U.S. armed forces' standard heavy machine gun around the world. It is also a valued part of the military armories of many foreign countries, including Great Britain, Canada, Australia, Germany, Japan, Brazil, Israel, India, South Africa, Spain, Indonesia, and Mexico.

## MK 19-3 40mm Grenade Machine Gun

The MK 19 40mm machine gun is a self-powered, air-cooled, disintegrating-belt fed, blowback-operated fully automatic weapon. It is designed to deliver significant firepower against enemy personnel and lightly armored

The MK 19 40mm grenade machine gun is a self-powered, air-cooled, belt-fed, blowback-operated weapon designed to deliver decisive firepower against enemy personnel and lightly armored vehicles. At times, the MK 19 is used in place of the M2 BMG as the primary suppressive weapon for combat support. The weapon can engage enemy troops out to 2,200 meters with accurate and lethal fire.

vehicles. It can be used in place of the M2 machine gun, or to augment the heavy weapon.

The weapon fires a variety of 40mm grenades. The M430 HEDP 40mm grenade is capable of piercing up to two inches of armor and produces fragments to kill personnel within five meters and wound personnel within fifteen meters of the point of impact. Other system components include the MK 64 cradle mount, Mod 5; M3 tripod mount; and the AN/TVS-5 night vision sight. The complete weapon system weighs 137 pounds, with a rate of fire of 325 rounds per minute. The maximum range of the gun is 2,200 meters.

## M136 AT4

The M136 AT4 is the Army's principal light antitank weapon, providing precision delivery of an 84mm high-explosive antiarmor warhead, with negligible recoil. The M136 AT4 is a man-portable, self-contained, antiarmor weapon consisting of a free-flight, fin-stabilized, rocket-type cartridge packed in an expendable, one-piece, fiberglass-wrapped tube. Unlike the M72 LAW (light antitank weapon), the AT4 launcher does not need to be extended before firing. When the warhead makes impact with the target, the nosecone crushes and the impact sensor will activate the internal fuse. Upon ignition, the piezoelectric fuse element triggers the detonator, initiating the main charge. This results in penetration where the main charge fires and sends the warhead body into a directional gas jet that is capable of penetrating over seventeen inches of armor plate. The aftereffects are "spalling," the projecting of fragments and incendiary effects, generating blinding light and obliterating the interior of the target.

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CHAPTER 6

# TACTICAL GEAR

MARSOC is part of SOCOM's goal to be the premier team of special warriors, tasked with helping accomplish the strategic objectives of the United States. The MARSOC motto—Always Faithful, Always Forward—builds on the Marine Corps motto, and means that our nation can rely on our Marines. That has real value for our country, for the Corps, and for SOCOM. As MARSOC takes its place in the history of the Corps, whenever the commander in chief of the United States may next make the request, "Send in the Marines," there is a good probability that MARSOC Marines are already there. In leading the Global War on Terrorism, they undoubtedly have to be thoroughly prepared and highly motivated, but they also have to be properly equipped. This chapter focuses on the gear that helps them live up to MARSOC, and the expectation to carry the fight wherever they are needed.

## IMPROVED LOAD BEARING EQUIPMENT (ILBE)

During the Vietnam War, the Marine Corps used M1961 web gear that consisted of an equipment belt, suspenders, butt pack, ammo pouches, canteen cover, USMC first-aid kit, and first-aid/compass pouch. It was commonly referred to as "782" or "deuce" gear, so named after the form number that Marines signed acknowledging receipt of and responsibility for individual equipment like the web gear. As the years went by, and carrying methods as well as missions evolved, Marines placed extra magazines into BDU pockets, pouches, and vests. Today the improved load bearing equipment (ILBE) is a load carrying system that is designed to provide the Marine with a durable and lightweight method to transport individual combat clothing and equipment. The system is made up of two major components: the pack system and the assault load carrier (ALC).

Dependent on the mission, the MARSOC operator may choose the assault load carrier. The ALC provides easy access to ammunition and other items during the ever-changing mission profile of the MARSOC Marine.

OPPOSITE: The ground mobility vehicle (GMV) had its origins in Desert Storm when Special Operations Forces needed a more robust version of the Humvee. The GMV's cupola can mount various weapons, including the M2 .50-caliber machine gun and MK 19 automatic grenade launcher.

ABOVE: Two MARSOC operators model the latest in Afghanistan "Battle Rattle." Officially, it is referred to as individual load bearing equipment (ILBE). The operators have some latitude in the selection and placement of personal gear. The Marine on the left has mounted extra M1911 magazines on the front of the plate carrier, while his teammate has chosen to place M4 ammo in a similar manner. Radios, knives, and an assortment of pouches are positioned for ease of access during battle. The Marine on the left is also wearing a small waist belt which carries his individual first-aid kit (IFAK) for immediate access.

From the fast-paced CQB mission to lengthy special reconnaissance (SR) operations, configurable pouches may hold magazines for M4A1 5.56mm, MP5 9mm, or 7.62mm, dependent on the weapon of choice for the Marine. Small pockets and pouches are readily available to accommodate .45-caliber or 9mm pistol magazines, shotgun shells, first-aid field dressing, flex cuffs, strobes, chem lights, pressure dressings, and grenades (i.e. smoke, stun, CS gas, and fragmentation).

Each variant is of a modular nature, where the vest is made up of attachment points, such as the pouch attachment ladder system (PALS). The PALS is a grid system of webbing that allows for the modification of the Marines' vest with assorted holsters, magazine pouches, radio pockets, etc. Internal pockets allow the operators to stow maps or other gear. Additionally, these vests may have various-sized back pouches to accommodate such items as protective masks, helmets, demolition equipment, and other mission-essential items.

Recently, as seen in Operations Enduring Freedom and Iraqi Freedom, many of the MARSOC Marines are gravitating to the chest harness and armor plate carriers. A number of manufacturers (i.e. Blackhawk Industries, Eagle Industries, High Speed Gear, Tactical Tailor, etc.) feature such commercially off-the-shelf (COTS) harnesses. Larger pouches will accommodate two to three M4 thirty-round magazines, depending on the manufacturer, while some operators utilize what is called a shingle, with one magazine per insert. The other pouches will accommodate such items as hydration systems, radio, MRE, compass, laser pointer, or other mission-essential equipment.

The team's standard operating procedure (SOP) will determine the layout of the mission-essential gear. All team members are sure of each member's equipment capabilities; equipment is exchangeable, training continuity is achievable, and less variation in team equipment means fewer problems to consider. Another item commonly worn on the vests is the U.S. flag along with the operator's blood type, most often in an IR version.

## Global Positioning System

How do MARSOC Marines navigate to exact locations through the mountains? How would a team conduct a strategic reconnaissance, or a reconnaissance and surveillance (R&S) in the dead of night, traversing sand dunes and wadis in the middle of an enemy desert or the mountainous terrain in Afghanistan? They use a device known as the global positioning system, or GPS. While these modern Leathernecks are schooled in land navigation using maps and the standard-issue lensatic compasses, it is equally important for the teams to be able to have pinpoint accuracy when conducting a DA mission through the desert, or across the frozen tundra, in enemy territory, in the middle of the night. They will need to know the position of a terrorist's hideout, a radar station, or perhaps the location of a high-value target (HVT) when reporting in to headquarters. The global positioning system is a collection of satellites that orbit the Earth twice a day. During this orbit they transmit the precise time, latitude, longitude, and altitude information. Using a GPS receiver, Special Operations Forces can ascertain their exact location anywhere on the Earth.

The Marines use the lightweight and compact AN/PSN-13 defense advanced GPS receiver (DAGR), which is a replacement for the AN/PSN-11 precision lightweight GPS receiver (PLGR). The DAGR is the latest version of the U.S. Department of Defense handheld GPS units. It addresses the demanding requirements of the U.S. Special Operations forces. The DAGR is a lightweight, handheld, self-contained, dual-frequency (L1/L2), SAASM-based (SAASM, for selective availability/antispoofing module, used by military global positioning system receivers to allow decryption of precision GPS coordinates) GPS receiver providing dual-frequency precise positioning service, with an easy to learn and use graphical user interface that provides real-time position, velocity, and time information.

The primary operational mission of the DAGR is to provide precision navigation and timing data to land-based warfighting operations and operations other than war. These include ground personnel, indirect fire weapon systems, and armored vehicles. The DAGR can also be used as a secondary or supplemental aid to aviation-based missions that involve operations in low-dynamic aircraft, such as helicopters, and as an aid to navigation in waterborne operations, such as for combat swimmers, submarines, and watercraft.

The Marines use the lightweight and compact AN/PSN-13 defense advanced GPS receiver (DAGR), which is a replacement for the AN/PSN-11 precision lightweight GPS receiver (PLGR). The primary operational mission of the DAGR is to provide precision navigation and timing data to land-based warfighting operations and operations other than war. The compact DAGR is easily stowed in the cavernous rucksack, or even in a pocket of the operator's assault vest.

This Marine has attached a Garmin Foretrex 101 GPS navigation device to the back of his gloves. The Foretrex is a hands-free GPS in a compact, lightweight, and waterproof package. The device is waterproof, and weighing less than three ounces, it is lighter than many watches. It can store twenty routes and five hundred way points. Powered by two AAA batteries, it can run for fifteen hours.

The DAGR has new features that were not available on the older PLGR. These include web-hosted computer-based training, online status of repairs and shipping tracking, reduced reprogramming costs via web-based downloads and DAGR-to-DAGR reprogramming, enhanced antijam performance, maps functionality, graphical user interface (GUI) "ease of use" via user feedback, popular commercial GPS features and enhanced targeting, and both LRF and CAS9-line growth.

Weighing a scant one pound with batteries installed, the GPS unit is easily stowed in the cavernous rucksack or vest in use with the MSOTs. In addition to handheld operation, the DAGR can be installed in various vehicles and airborne platforms.

## Strobes

Signaling has evolved immensely over the ages, from biblical times, when armies used torches, to the angle head flashlight, often referred to as the "moon beam," which has been in use since 1942. In the 1980s, chemical light sticks became popular and can still be seen in use on today's battlefield. One of the most critical needs of signaling is for the purpose of IFF, or identification, friend or foe. Installed in aircraft and combat vehicles, the IFF device emits a signal positively identifying it as friendly. For the operator on the ground, it is visible and infrared (IR) light signals.

As the MSOTs hit the battlefield today—or rather tonight—they have numerous methods of signaling, both

Infrared (IR) strobes, from left to right, MS-2000(M), Phoenix Jr. and VIPIR. Each of these strobes is omnidirectional. The MS white light is equivalent to 250,000 lumens. It is also fitted with an IR shield, visible only with NVGs. This Phoenix Jr. IR transmitter with battery weighs a mere two ounces and is user programmable. With NVGs, it is visible up to five miles. The VIPIR utilizes LEDs (light emitting diodes), and depending on the particular model, the light may have from one to five of these LED lights.

visible and infrared. The MS-2000(M) strobe is the most common among the U.S. military. Powered by two AA batteries, this strobe can be configured in white light, IR filter visible only with night vision goggles, and a blue filter with a directional shield that helps distinguish the strobe from ground fire.

The VIP and VIPIR series have been modified to include interactive friend or foe capabilities. This series of lights can be used for everything from personal identification to landing zone lighting. These signaling devices utilize LEDs (light emitting diodes), which are solid-state semiconductor diodes that emit colored light. An epoxy resin is used to encapsulate the semiconductor, while producing a lens to further focus the light.

The smallest of these is the Phoenix IR transmitter, which can still be found in use. It weighs a mere two ounces and is powered by a nine-volt battery. The Phoenix can be programmed to various lighting patterns, while the Phoenix Jr. simply has an on/off switch.

The AN/PAS-23 mini thermal monocular (MTM) is a handheld thermal imaging device. The MTM has an integrated laser pointer and digital camera. The laser pointer provides accurate target designation, while the camera enables the operator to recover, store, and download the thermal images.

When the Marines need close air support (CAS), or when they need to destroy an enemy position, they use a method called "lasing" or "painting" a target. The operator illuminates a target with a laser designator, and then the munitions (i.e., smart bomb) guide to a spot of laser energy reflected from the target. The AN/PEQ-1A SOFLAM has the capability to range out to twenty kilometers and can designate to five kilometers. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

## AN/PEQ-1A SOFLAM

When it absolutely, positively has to be destroyed, you put an SOF team on the ground and a fast mover with a smart bomb in the air, and the result is one smoking bomb crater. The Special Operations Forces laser acquisition marker (SOFLAM) is lighter and smaller than the current laser marker used by regular U.S. military forces. It provides the special tactics team with the capability to locate and designate critical enemy targets for destruction using laser-guided ordnance. It can be used in daylight, or at night with the attached night vision optics.

The SOFLAM, officially called the ground laser target designator (GLTD II) by the manufacturer, Northrop Grumman, is a compact, lightweight, portable laser target designator and rangefinder. The SOFLAM is capable of exporting range data via an RS422 link and importing azimuth and elevation. It was designed to enable Special Operations Forces to direct laser-guided smart weapons, such as Paveway bombs, Hellfire missiles, and Copperhead munitions. The AN/PEQ-1A can be implemented as part of a sophisticated, digitized fire control system with thermal or image-intensified sights.

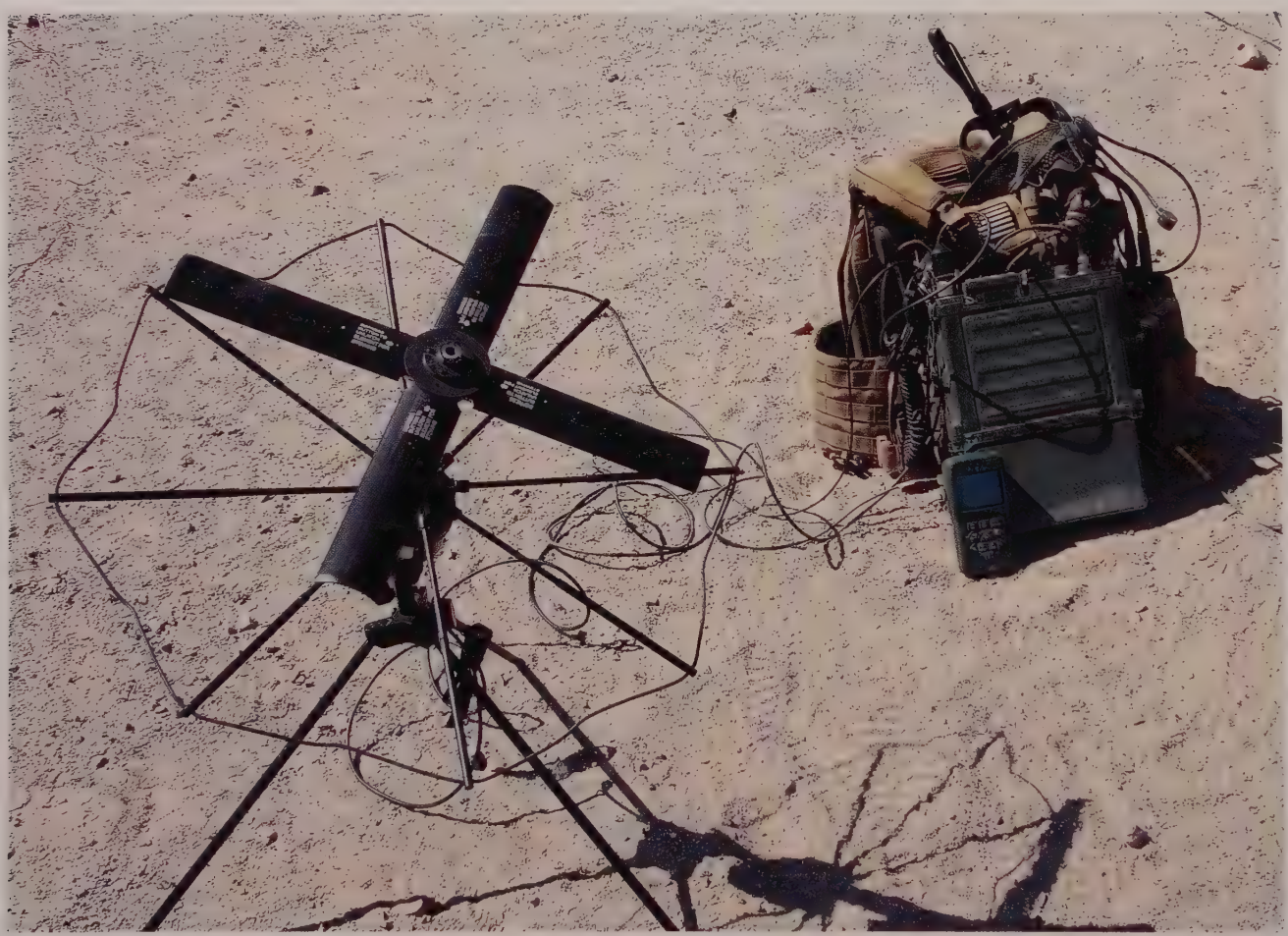
The SOFLAM uses the PRF, or pulse repetition frequency, that can be set to NATO STANAG Band I or II or is programmable. (Note: STANAG represents standards and agreements set forth by NATO, for the process, procedures, terms, and conditions under which mutual government quality assurance of defense products are to be performed by the appropriate national authority of one NATO member nation at the request of another NATO member nation or NATO organization.) PRF is the number of pulses per second transmitted by a laser.

## RADIOS

Communication is paramount to a successful mission, and special operations Marines take full advantage of the latest communication gear available. You see it when they take off their floppy hats, and the headgear of the interteam radio is visible. It is there when the team unfolds the umbrella-like satellite antennae and connects it to the compact PRC-117F. Whether using UHF, VHF, line of sight, or SATCOM, the team will maintain the vital link to its headquarters.

### AN/PRC-117F

Communications is the lifeline of any SOF team on a mission. For long-range communications, the AN/PRC-117F covers the entire 30 to 512 MHz frequency range while offering embedded COMSEC and Havequick I/II ECCM capabilities. This advanced software reprogrammable digital radio supports continuous operation across the 90 to 420 MHz band, providing 20 watt FM and 10 watt AM transmit power with Havequick I/II capability (10 watt FM in other frequency ranges). Fully compatible with the KY-57



The multiband AN/PRC-117F operates in VHF AM and FM, UHF AM, and UHF DAMA SATCOM. DAMA, (demand assigned multiple access) permits several hundred users to share one narrow band SATCOM channel, based on need or demand. It is voice/data and has embedded crypto, SATCOM, and ECCM capabilities. There is a GPS interface capability embedded that will transmit the user's coordinates when the operator keys the handset. The 117F provides long-range, secure communications for the Marines.

ABOVE: The AN/PRC-148 (V) maritime multiband inter/intra team radio, called the "M-Biter," is the standard team radio among U.S. SOF teams. This compact handheld individual tactical radio is AM/FM, voice or data, VHF or UHF (continuous coverage from 30-512 MHz), and is waterproof to two atmospheres. Weighing less than three pounds, it is easily stowed on the operator's assault vest.

LEFT: Intrateam communications is essential to a successful operation. The Marines wear a headset to maintain the comm link between team members. The pliable rubber ear cup establishes contact with the operator's head to lessen ambient sounds. The headset has an adjustable elastic strap, allowing the user to comfortably wear the device whether fast-roping, moving under fire, or even swimming. The unit is sealed to allow the team to insert via water.

The Silynx QuietOps is an extremely versatile headset system (shown here is the push-to-talk (PTT) device). It allows the MARSOC operators to accomplish a full mission, from pre-briefing to postmission briefing, using one headset system. The Marine has the option to select an in-ear, ear muff, or covert headset, depending on the mission.

TSEC in voice and data modes to secure transmissions, the radio supports both DS-101 and DS-102 fill interfaces, and all common fill devices for Havequick word of day (WOD) and encryption key information. This device supports the Department of Defense requirement for a lightweight, secure, network-capable, multiband, multimission, antijam, voice/imagery/data communication capability in a single package.

## PRC-148 MBITR

Thales Communications' multiband inter/intra team radio (MBITR) is a powerful, tactical, handheld radio designed for the U.S. Special Operations Command. The MBITR more than meets the tough SOCOM requirements, and provides a secure voice and digital-data radio with exceptional versatility, ruggedness, and reliability.

The immersible unit weighs less than two pounds and includes a keypad, graphics display, and built-in speaker-microphone. Typical of the advanced designs of Thales radios, MBITR utilizes digital-signal processing and flash memory to support functions traditionally performed by discrete hardware in other manufacturers' equipment. The power output is up to 5 watts over the 30- to 512-MHz frequency band. The MBITR has embedded Type 1 COMSEC for both voice and data traffic.

LEFT: When Marines need to make a dynamic entry into a structure, they may employ a specialized grenade known as a flashbang. The M84 is a nonfragmentation and nonlethal stun grenade that provides the entry team with a consistent and effective means of neutralizing any insurgent threat. The M84 produces a brilliant flash and deafening explosion, which disorients any terrorist in the room. This grenade gives the Marines a tactical edge when engaging enemy personnel. UNIVERSAL PROPULSION

BELOW: While the Marines of MARSOC are equipped with the latest and greatest in weaponry and equipment, the venerable smoke grenade still can be found tucked in the rucksack or chest rig. The M18 smoke grenade can be used for signaling or marking positions, such as a helicopter landing zone (HLZ), producing a thick cloud of colored smoke for fifty to ninety seconds. The grenade comes in red, green, yellow, and violet.

## GROUND MOBILITY VEHICLES

Thirty years ago, the U.S. Army issued a specification for a new tactical vehicle, and the concept for the high-mobility multipurpose wheeled vehicle (HMMWV or Humvee) was conceived. The new tactical vehicle entered service with the U.S. military in 1985 and quickly became as adaptable to its mission as the venerable jeep it replaced. The HMMWV has a low profile of six feet, a seven-foot-wide stance, and is fifteen feet long. This gives it a low center of gravity, making it a stable, road-hugging vehicle that is difficult to roll over. On one occasion, while traversing the edge of an impact zone, the driver told me to tighten my seat belt and headed down a hillside that I would not have tried walking down.

In the 1990s, the Special Forces missions established a need for a more robust version of the HMMWV. During the First Gulf War, the Special Forces modified Humvees for extended desert missions. These modified Desert HMMWVs were often referred to as "Dum-Vees," though this was never an official name for the vehicle. The modifications included a heavier suspension, more powerful engine, and an open bed and back for storage of water and fuel and other mission-essential items.

Further modifications of the vehicle included the placement of a cupola on the roof, which was used for mounting various weapons systems, including M2 .50-caliber machine guns, M240 7.62mm machine guns, MK 19/MK 47 40mm grenade launchers, and M249 SAW 5.56mm machine guns. Some of these modifications were conducted by the original manufacturers, while other enhancements were performed by U.S. Army depots and third party suppliers.

Used by Special Forces mounted teams, the basic deployment was four vehicles per operational detachment

The cargo compartment of the GMV-M has been modified with additional armor plating. This provides the Marines with extra protection against small arms fire and helps defeat explosively formed projectiles. Its open configuration facilitates the addition of mounts to accommodate an assortment of weapons, such as the M240 machine guns seen here. Rear doors allow the Marines to dismount quickly when necessary.

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alpha (ODA), with a crew of three soldiers per vehicle. The "Desert Humvee" greatly enhanced the capability of the mounted ODA, extending its mission endurance and flexibility. In the mid-1990s the HMMWV M1025 model was upgraded for SOF missions. These specially modified Humvees were redesignated as ground mobility vehicles, or GMVs.

The need for improved payload and performance led manufacturer AM General to provide a new expanded capacity vehicle (ECV), the model M1113. In 2003, the U.S. Special Operations Command fielded more than two hundred of the M1113 GMVs that had been modified for Special Operations Forces. In 2005, AM General began production of the M1165 variants, which incorporated higher levels of armor protection including frag kits that can be installed or removed in the field. Frag kits are vehicular armor developed by the U.S. Army Research Laboratory to defeat explosively formed projectiles (EFP), a type of improvised explosive device (IED).

Some of the modifications incorporated into the GMV include fifteen-gallon auxiliary fuel tanks to achieve longer distances, storage racks for ammo, an air compressor, electric winch, reinforcement of the rear floor, rollover bars, rear bench seats, electronic-rack mounting for communications equipment, recovery strap kits, jacks, skid plates, spare tire carriers, side rails, and an assortment of weapon mounts. Add-on armor provides 360-degree protection for the vehicle. There is also a cupola for the gunner. In addition to the weapons systems, the GMV can be fitted with smoke grenade launchers positioned in the rear and front. These tubes launch smoke canisters that airburst above and around the vehicle, creating an instant smoke screen, which is very useful when breaking contact.

Current efforts underway with the GMV family include a suspension upgrade that returns some of the payload capacity that was lost to the added armor, and a significant standardization effort to consolidate the multiple configurations of the GMV into a single SOF vehicle.

To accomplish these new upgrades, SOCOM turned to the Letterkenny Army Depot in Pennsylvania to build a vehicle with unique capabilities above and beyond those provided by the standard Army HMMWV.

A pair of GMV-Ms loaded up and ready for the next mission at a forward operating base (FOB) in Afghanistan. The Marines have added on a storage rack on the rear of the vehicle to carry rucksacks and other mission-essential gear. USMC PHOTO, MARSOC PAO

A side-by-side comparison shows the marked size difference between the HMMWV (left) and the M-ATV (right): HMMWV—sixteen feet in length, seven and a half feet wide, and six and a quarter feet in height; M-ATV—twenty and a half feet in length, eight feet wide, and nine feet in height. The mine-resistant, ambush-protected all-terrain vehicle offers more protection from roadside bombs compared to its predecessor, and features a V-shaped hull that redirects explosive blasts away from its crew. USMC PHOTO, CPL. MICHAEL CURVIN

SOCOM needed more firepower and durability than the conventional HMMWV. SOCOM wanted increased lethality, survivability, and sustainability. Working together with U.S. Special Operations Forces, the engineers and workers at Letterkenny have developed and modified special-purpose HMMWVs that are transformed into the new fighting platform called GMVs. The GMV-M (for Marine) vehicle is tailored to meet various MARSOC operational scenarios and tempos.

The U.S. Special Operations Command (SOCOM) ground mobility vehicle program modifies the basic Humvee into one of several GMV variants. The Marines of MARSOC use the GMV-M (USMC) for the Marine Special Operations Command. The workhorse GMV of the U.S. Special Operations Forces is the 1-1/2 ton, 4x4 M1165. This tactical vehicle is designed for use over all types of roads, as well as cross-country terrain, in all weather conditions. The vehicle has four driving wheels powered by a 6.5-liter V-8, turbocharged, liquid-cooled diesel engine that develops 190 horsepower at 3,400 rpm. It has four-wheel hydraulic disc brakes and a mechanical parking brake, as well as power steering. It is equipped with a pintle hook for towing; tie downs and lifting eyes are provided for air, rail, or sea shipment.

The M1165 is an expanded capacity vehicle capable of transporting a four-man crew, weapons, and mission-essential equipment. The M1165 is equipped with a reinforced frame, cross-members, lifting shackles, heavy-duty variable rate rear springs, shock absorbers, reinforced control arms, military 37x12.5 low-profile run-flat radial tires, and a transfer case and differential with a modified gear ratio to accommodate higher payloads. The suspension system is an independent coil spring-type system.

The GMV is constructed on a steel frame with boxed frame rails and five cross members constructed from high-grade alloy steel. Once the substructure is assembled, E-coating is applied to provide additional corrosion protection. The aluminum body reduces weight and

This M-ATV is equipped with a "Panama City" mine roller attachment affixed to the front of the vehicle. The device, developed by the Panama City Division of the Naval Surface Warfare Center, is designed to predetonate improvised explosive devices (IED). The vehicle has large tires, augmented hydraulics, and a durable, reinforced frame that can withstand the abuse of being driven through rugged terrain of Afghanistan. MARSOC

provides resistance to corrosion. Aluminum body panels are riveted and bonded together with technologically advanced adhesives to provide additional strength. The body is designed to flex to accommodate off-road stresses.

Fully loaded M1165s can scale grades as steep as 60 percent and negotiate side slopes of up to 40 percent. The GMV is capable of traversing hard-bottom water crossings up to thirty inches without installing a deep-water fording kit, and up to sixty inches with the kit installed. The engine is equipped for deep-water fording, having a specially sealed dipstick, dipstick tube, and vented CDR valve. Combining those features with sixteen inches of ground clearance, the GMV is an exceptional off-road vehicle.

The GMV is a light tactical vehicle specifically designed to provide a combination of mobility and payload to provide the tactical flexibility required by SOF units. The addition of field-installable armor allows the operators to trade payload for protection to meet their ever-changing mission requirements. Other upgrades include frag kits (armor protection), fire suppression systems, and a high-output 30,000 BTU air conditioning unit. The armor is available in two kits, an 'A' kit and a 'B' kit, which, when combined, provide gapless mine and ballistic protection.

The GMV is designed with an open rear, whereas the cabin of a regular HMMWV is enclosed. This flat bed area is used to store fuel, ammunition, rations, and other supplies. The GMV has a cruising range of up to 275 miles, which is well suited for Marine special operations teams that often need to operate behind enemy lines, on their own, with only occasional resupply from the air. MSOB teams, as well as other SOF units, undergo extensive training in driving and maintaining the vehicle, with an emphasis on off-road handling and in-field repairs. The new series of GMVs will serve MARSOC as they continue to prosecute America's war on terrorism.

## M-ATV SOCOM VARIANT

The M-ATV is a tactical vehicle built by Oshkosh Corporation, Oshkosh, Wisconsin, that is planned to replace the up-armored HMMWV in Afghanistan. M-ATV is the mil-speak acronym for mine-resistant ambush-protected (MRAP) all-terrain vehicle. SOCOM worked closely with the MRAP Joint Program Office and Oshkosh Defense to design a vehicle that would support the unique needs of Special Operations Forces' missions. The vehicle had to provide the off-road mobility needed, as well as the lifesaving protection required. What resulted was the "tailor-made" M-ATV, with the protection of the MRAP and the mobility of the GMV.

Heavily armored MRAP vehicles, which were fielded successfully in Iraq, proved too cumbersome and unstable in the mountainous terrain of Afghanistan. The M-ATV is lighter and has the right combination of agility and armor for Afghanistan's combat and terrain demands. Despite being lighter than the MRAPs used in Iraq, the M-ATV still provides excellent protection from IEDs, roadside bombs, and rocket-propelled grenades.

The M-ATV is powered by a Caterpillar C7, 350-horsepower engine with an Allison 3500 SP transmission, giving the vehicle a top speed of sixty-five miles per hour. The vehicle incorporates rugged, durable components and systems to provide the operators the maximum in mobility and survivability. Derived from the medium tactical vehicle replacement platform (MTVR), the M-ATV incorporates an Oshkosh TAK-4 independent suspension system with sixteen inches of wheel travel that delivers the mobility needed to overcome rocky, steep terrain, mountainous landscapes, and unimproved road networks. The TAK-4 suspension uses a double-wishbone, heavy, unequal-length control-arm setup with coil springs

Marines from Special Operations Task Force West on patrol in the village of Zanghlav, Afghanistan. The coalition force conducted the patrol to increase base security and promote Government of the Islamic Republic of Afghanistan governance in Herat Province.
USMC PHOTO, SGT. BRIAN KESTER

suspension with noncoaxial pneumatic shock absorbers to control vertical movement.

Noteworthy features of the M-ATV include IED jammers, V-shaped blast-dispersing monocoque hull, substantial increase in power-to-weight ratio over previous MRAPs, and the ability to ford hard-bottom freshwater to depths of up to five feet. It can generate ten kilowatts of vehicle host power and export an additional twenty kilowatts for mission equipment. The run-flat tire system enables the M-ATV to drive at thirty miles per hour, even with two flat tires. It carries up to five personnel: four plus a gunner. Its curb weight is just under twenty-five thousand pounds, with a payload capacity of four thousand pounds. The M-ATV's low center of gravity prevents rollovers and ensures maximum off-road mobility.

The SOCOM variant of the M-ATV includes a bolt-on ram bumper, which can be easily installed and removed, and a folding ladder and hood platform for easy roof access from the front of the vehicle. The cargo deck is modified to make it highly configurable in order to accept specialized equipment based on each mission's requirements. Rear storage is accessible through an armored cargo access hatch in the passenger capsule, which can seat five when configured with a common remotely operated weapon station (CROWS), or four with a gunner. The SOCOM variant also features the addition of an armored cargo hatch, providing access to mission equipment stored in the cargo deck. It will also have a larger front windshield that provides for increased visibility, particularly of threats that are above the vehicle.

The M-ATV SOCOM variant provides Marine Corps special operators the required protection combined with superior off-road mobility, which has proven beneficial during MARSOC operations in Afghanistan. DOD statistics show the casualty rate for MRAPs is 6 percent, making it "the most survivable vehicle we have in the U.S. inventory; by comparison the up-armored HMMWV has a 22 percent casualty rate."

The M-ATV is a tactical vehicle built by the Wisconsin-based Oshkosh Corporation and is planned as a replacement of the up-armored HMMWV in Afghanistan. The M-ATV is well suited to support small-unit combat operations in highly restricted rural, mountainous, and urban environments. DOD PHOTO

An M-ATV cruises down the road, its crew on the lookout for hostile targets in the windows of the buildings ahead during convoy assault training aboard Marine Corps Air Station Yuma, Arizona. USMC PHOTO, LANCE CPL. CLAYTON L. VONDERAHE

CHAPTER 7

# TACTICS, TECHNIQUES, AND PROCEDURES

"TO WIN WARS BEFORE THEY EVER BEGIN" is the slogan on the MARSOC recruitment posters. As the newest member of the American special operations community, MARSOC continues to grow to its authorized strength while supporting SOCOM missions around the world. As with any new organization, there are the inevitable challenges, but nothing for which the Marines will not be able to adapt, overcome, or improvise the solutions. Commenting on the operational readiness of the Marine Special Operations Forces, Maj. Gen. Paul Lefebvre, MARSOC's third commander said: "For the first time in its history, [in 2007] MARSOC deployed a Special Operations Task Force [SOTF], into Afghanistan under CJSOTF-A. Made up of Marines, soldiers, sailors, airmen, and a variety of Department of Defense and contracted civilians, it was a critical step in the legitimacy of Marine Special Operations Forces within the SOCOM community.

"The SOTF deployment demonstrated MARSOC's ability to provide command and control of SOF over a very large battlespace, and incorporate fused intelligence capabilities, combat support and combat service support down to the lowest level." The tactics, techniques, and procedures covered in this chapter illustrate these capabilities.

OPPOSITE: The FRIES, or fast rope insertion/extraction system, is the express elevator to the battlefield. By employing the FRIES, the Force Recon team can be inserted in a matter of seconds. The FRIES begins with small woven wool cords that are braided into a rope roughly three inches in diameter. The rope is rolled into a deployment bag and the end secured to the helicopter. USMC PHOTO, MARSOC PAO

ABOVE: While everyone is focused on fast-roping, MARSOC still trains in rappelling. There are times when you have to abseil down the side of a mountain, bridge, or building, and this calls for rope work, not an aerial platform. The downside of rappelling is that the Marine is connected to the rope via carabineer, which he must disconnect upon reaching the ground; the upside is that he has control of his descent and can carry a much heavier load. Pictured here, a MARSOC Marine eases down the side of a mountain during a three-day combat reconnaissance patrol in the Bala Baluk district in Afghanistan's Farah province. USAF PHOTO, STAFF SGT. NICHOLAS PILCH

## FRIES

Fast Rope Insertion/Extraction System. The way to "insert" your assault force on the ground in seconds, this system begins with small woven ropes made of wool; these ropes are then braided into a larger rope. The rope is rolled into a deployment bag and the end secured to the helicopter. Depending on the model of chopper, it can be just outside on the hoist mechanism of the side door, or attached to a bracket off the back ramp. Once over the insertion point, the rope is deployed, and even as it is hitting the ground, the Marines are jumping onto the woolen line and sliding down as easily as a fireman goes down a pole. Once the team is safely on the ground, the flight engineer or gunner, depending on the type of helicopter, will pull the safety pin, and the rope will fall to the ground. Such a system is extremely useful in the rapid deployment of MARSOC personnel; an entire assault team can be inserted within ten to fifteen seconds. FRIES is the most accepted way of getting a force onto the ground expeditiously. Unlike rappelling, once the trooper hits the ground, he is "free" of the rope and can begin his mission.

The second part of FRIES is the "extraction" method originally referred to as SPIES, or special procedure insertion, extraction system; the Army has combined both methods into one term. While fast-roping gets you down quick, there are times when you have to extract just as fast. The problem is, there is no LZ for the Blackhawk of the 160th SOAR(A) to land, and the "bad guys" are closing in on your position. This technique is similar to the McGuire and stabo rigs developed during the Vietnam War. Both used multiple ropes, which often resulted in the troops colliding into one another, though the latter at least had the benefit of allowing the user to use his weapon while on the ride up. What served the Special Forces troops of the 1960s has been refined to the new FRIES method.

While the technique has changed, the methodology remains. A single rope is lowered from the hovering helicopter. Attached to this rope are rings, woven and secured into the rope at approximately five-foot intervals. There can be as many as eight rings on the rope. The operators wearing special harnesses, similar to a parachute harness, will attach themselves to the rope via the rings.

While fast-roping gets you down quick, there are times when you have to leave just as quickly. The special patrol insertion/extraction system is used for getting "out of Dodge" in a hurry. It consists of a synthetic fiber, eight-strand braid, 1 3/4" in diameter. The tensile strength of the rope is 35,000 pounds, bolts in the sleeve are 26,000 pounds, the ring at the top of sleeve is 2,500 pounds, and the sleeve is 9,000 pounds. Here a team of Marines is attached to a line suspended beneath a V-22 Osprey. USMC PHOTO, MARSOC PAO

This is accomplished by clipping in a snap link that is at the top of the harness.

Once all team members are secured, a signal is given and the soldiers become "airborne" in reverse and extracted out of harm's way. This method, while tried and tested, allows the team members to maintain covering fire from their weapons as they extract. Once the team has been whisked out of enemy range, and an LZ can be located, the helicopter pilot will bring the troops to ground again. At this time they will disconnect from the rope and board the chopper, which will then complete the extraction.

An operator with 1st Marine Special Operations Battalion rappels out of a CH-46 Sea Knight helicopter. When inserting a team with heavy rucksack for their missions, rappelling can be the best option. Rappelling provides the operator with a smooth, stoppable transition from the aircraft to the ground. USMC PHOTO, CPL. RICHARD BLUMENSTEIN

## MC-5 STATIC LINE/FREE-FALL RAM AIR PARACHUTE SYSTEM (SL/FF RAPS)

The MC-5 RAPS is the primary parachute in use as a method of insertion of Marines for deep reconnaissance or other DA missions. The MC-5 SL/FF RAPS can be configured for static line or free fall, depending on mission requirements. The MC-5 integrates components of the Paraflite MT-1XX Interim RAPS, the MC-4 RAPS, and the MT-1XS S/L convertible static line system into one versatile parachute system. The system uses identical main and reserve canopies, which not only reduce the logistics involved with separate canopies, but also eliminates the training, maintenance, and operational use of a different size/configuration reserve canopy.

The system's identical main and reserve parachutes, which can be interchanged, are 370 square feet, seven-celled, and are manufactured from 1.1-ounce F-111 nylon ripstop fabric. A cotton reinforcement/buffering panel is installed on the top and bottom skin of the canopy. The deployment sequence for the reserve canopy incorporates a free-bag system, which consists of a spring-loaded pilot chute, a bridle, and a deployment bag. The harness and container assembly has a two-pin main container to accommodate the static line. The leg straps/chest strap are fitted with quick ejector snaps.

## HALO/HAHO

There are times when you cannot sneak or force your way through an enemy's front door, or even a back door or window. You must insert your team clandestinely from afar and outside of the nation's territorial airspace or boundaries. High-altitude low-opening (HALO) or high-altitude high-opening (HAHO) can be a perfect solution for MARSOC teams needing to enter hostile territory without being observed.

HALO/HAHO parachute operations start with flights over or adjacent to the designated landing area from altitudes that are much higher than those used by conventional static-line parachuting for mass infantry airdrops such as can be performed by the 82nd Airborne Division. HALO/HAHO infiltrations are normally conducted under the cover of darkness or at twilight to reduce the chance of being observed. Using the ram air parachute system (RAPS), team members deploy their parachutes at the preplanned altitude, assemble in the air, and land together at a drop zone chosen with their mission in mind. High-altitude drops can be conducted even in adverse weather conditions.

Flying at an altitude of 25,000 to 43,000 feet MSL (mean sea level) the jump aircraft, normally an MC-130 Combat Talon, appears to be a nonthreatening aircraft, perhaps a commercial airliner, on an enemy's radar screen. The radar reflection of the parachutists is too weak to register on radar. This makes military free-fall (MFF) operations ideal for the infiltration of Marine special operations teams into hostile territory. While the maximum exit altitude is 43,000 feet above sea level, MFF operations may be performed at altitudes as low as 3,500 feet above ground level (AGL).

As the aircraft approaches the insertion point, the ramp is lowered. Due to the aircraft noise combined with the MFF parachutist helmet and oxygen mask, normal verbal communication is almost impossible. This requires the team to communicate using arm-and-hand signals or interteam radios. Having already received the signals to don helmets, unfasten seat belts, and check oxygen, the jumpmaster awaits for the team to signal back "OK."

About two minutes before the aircraft reaches the insertion point, the jumpmaster raises his arm upward from his side, telling the team to "stand up." Next he extends his arm straight out at shoulder level, palm up, then bends it to touch his helmet: "move to the rear." With their rucksacks or combat assault vests loaded with mission-essential equipment, the team heads toward the rear of the plane. If jumping from the side jump door, the lead man will be a meter away from the door; if going out the rear of the plane, he will stop at the hinge of the cargo ramp. Moments turn into an eternity and then it is time. When the plane reaches the coordinates for the drop, the jump light changes to green. "Go!" In a matter of seconds, the team heads down the ramp and out into the darkness as the drone of the plane's engines fade off in

A Marine assigned to G Company, 2nd Marine Special Operations Battalion, glides through the sunset sky toward his target during military free-fall operations held at Camp Lejeune, North Carolina. The Marines are trained in high-altitude parachuting as a means of insertion into enemy territory. Exiting the aircraft while wearing oxygen and all their combat equipment, the Marines silently glide into their targets with pinpoint accuracy. USMC PHOTO, GUNNERY SGT. E. V. WALSH

the distance. Depending on the mission parameters, the team will perform a HALO or HAHO jump.

In HALO, the operators exit the plane and free fall, meeting up at a prearranged time or altitude. Jumping in this manner, the team is so small that it is virtually invisible to the naked eye, particularly under the low light of twilight or night, and of course does not show up on enemy radar screens. Using GPS units and altimeters, the team members descend until they are near the drop zone. At this point, they open their chutes and prepare for the very short remaining trip to the ground.

The HAHO alternative also starts by jumping from extreme altitude with oxygen. The difference is that as soon as the team members jump, they immediately

deploy their steerable parachutes, using them to glide into the targeted area. In order to maintain formation integrity, each jumper has a strobe on his helmet, either normal or IR, and the team wears the appropriate NVGs. Additionally, each man in the team is on interteam radio for command and control of the insertion, as well as formation on the DZ.

## LAR-V REBREATHER

LAR stands for lung automatic rebreather and is a closed-circuit system, meaning it does not give off any telltale bubbles to compromise the swimmer. The LAR-V MK 25 provides a combat diver with enough oxygen to stay under the water for up to four hours. The exact time depends on the individual diver's rate of breathing and his depth in the water.

The term close-circuit oxygen rebreather describes a specialized type of underwater breathing apparatus (UBA). In this type of UBA, all exhaled gas is kept within the rig. As it is exhaled, the gas is carried via the exhalation hose to an absorbent canister through a carbon dioxide–absorbent bed that removes the carbon dioxide by chemically reacting with it. After the unused oxygen passes through the canister, it travels to the breathing bag, where it is available to be inhaled again by the diver.

The gas supply used in the LAR-V is pure oxygen, which prevents inert gas buildup in the diver and allows all the gas carried by the diver to be used for metabolic needs. Closed–circuit oxygen UBA offers advantages valuable to MARSOC, including stealth infiltration, extended operating duration, and lower weight than traditional open-circuit scuba.

For underwater infiltration, Special Ops Marines use a closed-circuit oxygen underwater breathing apparatus (UBA), the Draegar LAR-V MK 25. The closed-circuit system prevents any exhaust bubbles from being seen on the surface of the water, making it easier for the team members to infiltrate to their objective without being seen by enemy forces. A MARSOC Marine lets his fellow divers know his closed-circuit oxygen rebreather is "good to go" at Mile Hammock Bay. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

HALO/HAHO techniques are a prime method of inserting a MSOT into enemy territory. Due to extreme cold encountered during high-altitude parachute operations, the jumpers must have protective clothing and equipment to shield them from the harsh environment encountered at 25,000 feet and above. USMC PHOTO, LANCE CPL. STEPHEN C. BENSON

CHAPTER 8

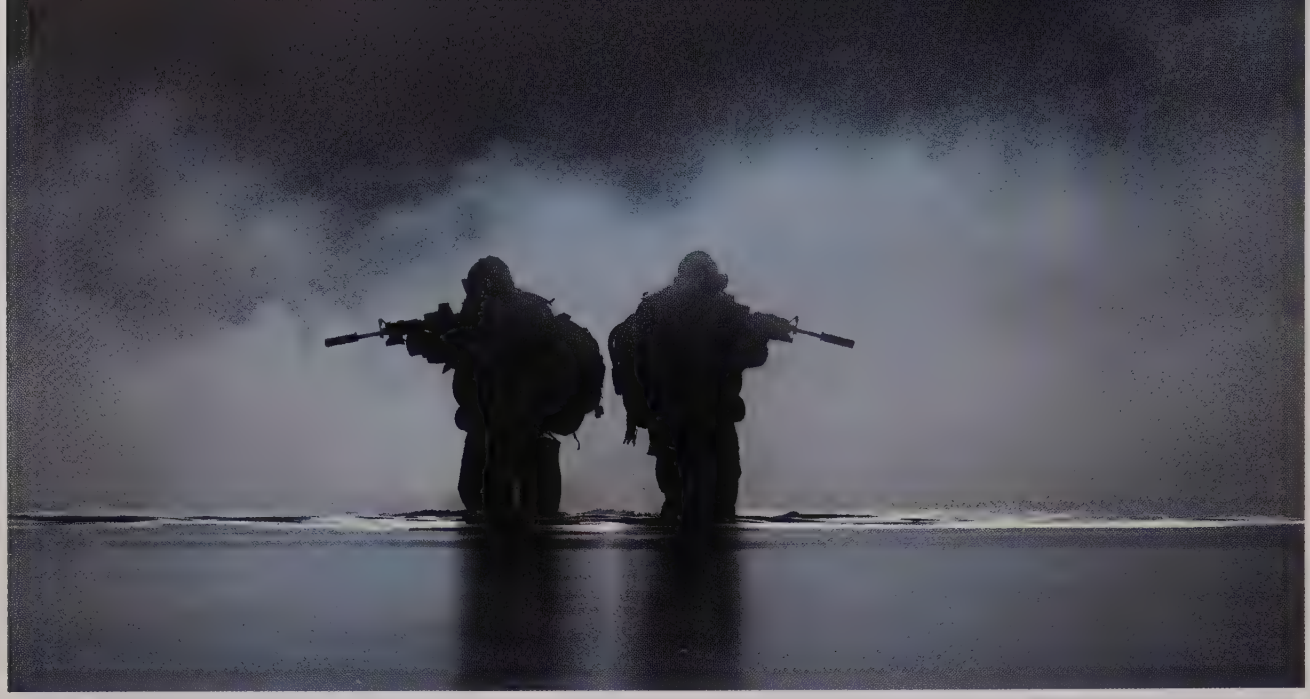
# MARSOC INTO THE FUTURE

WHILE MARSOC CONTINUES to build up the force, it is faced with the additional challenge of concurrently deploying the force for combat and other operations around the world. Lessons learned from ongoing operations have enabled the command to adapt its structure and training, as well as the operational cycle, to improve the force's capabilities. As it brings the unit up to strength, MARSOC continues to focus on its most valuable asset: its people. Whether it is recruiting, screening, assessment, or selection of the right Marines and sailors to serve in MARSOC, the command is committed to taking care of them; they are its most critical component. By acquiring and retaining the right people with the right skill set to perform special operations, and by providing them with the very best equipment, Marine special operations teams can conduct the missions that are being assigned to them by SOCOM and the geographic combatant commanders.

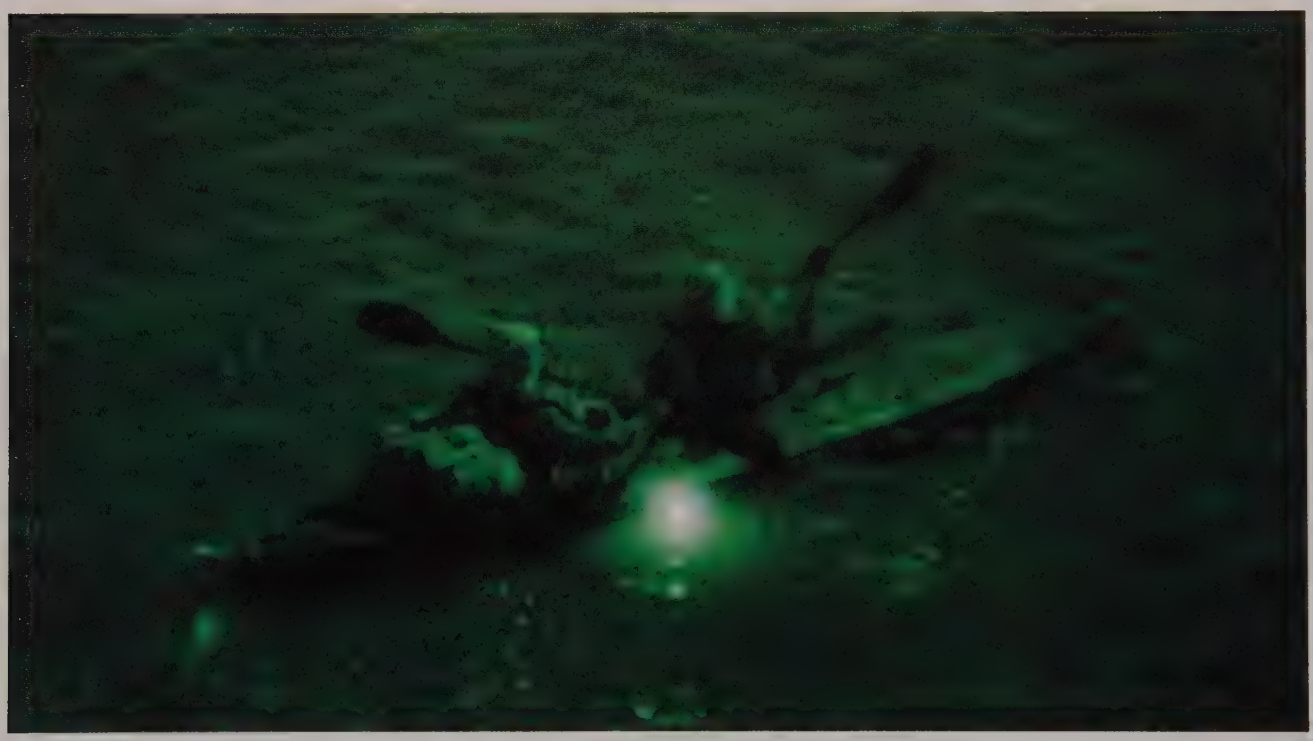
The demands placed on the Marines of MARSOC are great. First and foremost, they are members of the U.S. Marine Corps, the "nation's finest." Many have pursued the path of the Amphibious Reconnaissance Marine, becoming an "elite warrior" in an already "elite force." Finally, they volunteer for MARSOC; if selected they become the crème de la crème among the Special Operations Forces of the United States military. The SOF community asks a great deal of its operators. They operate in small groups, in austere conditions, in remote areas, taking the war beyond the front lines.

OPPOSITE: Marines and soldiers disappear into an artificial sandstorm caused by the rotor wash of a UH-60 Blackhawk helicopter. They are visiting Special Operations Task Force-West, a forward operating base (FOB) in the village of Darrah-I-Bum, Badghis Province, Afghanistan. USMC PHOTO, SGT. BRIAN KESTERAS

ABOVE: It's an insurgent's worse nightmare as two Marines breach the door and enter the room. Most likely after blowing out the door or tossing in an M84 flashbang, the sight of these operators is the last thing an enemy fighter will ever see. As with other Special Operations Forces, MARSOC Marines plan, rehearse, and fine-tune their mission profiles. Operating at the tip of the spear, failure is not an option.



A pair of MARSOC Marines comes ashore with the ebb tide under the cover of fog. Operating in small teams, critical skills operators often engage an enemy force much larger than their team strength. The Marines are trained to use their brains, as well as their weaponry, to overcome these odds. USMC PHOTO, MARSOC PAO



Marines from 3rd Marine Special Operations Battalion paddle a Klepper folding canoe as part of a maritime mobility exercise at Camp Lejeune, November 18, 2010. The exercise was used by the 3rd MSOB commander to assess his battalion and quickly communicate his expectations of the command. USMC PHOTO, SGT. EDMUND HATCH

"One shot, one kill," a MARSOC Marine takes aim with a suppressed MK 11 Mod 0 sniper rifle. Every Marine is a rifleman; he stands poised to defend freedom at all costs. Those of the military know the cost of freedom more than anyone. For the MARSOC Marines, who are at the tip of the spear, they remain ever vigilant, Semper Fi! USMC PHOTO, MARSOC PAO

A sergeant with a Marine Special Operations Team using an M1911 instructs an Afghan National Army commando with an M9 Beretta on proper body positioning for firing a pistol. Outside their compound in Herat, Afghanistan, members of the 9th Commando Kandak trained alongside their Marine counterparts to sharpen their weapons skills. U.S. MARINE PHOTO, SGT. BRIAN KESTER

As members of SOCOM, the Marine special operators are not only door kickers, but are tasked with forging relationships that cross national and cultural barriers. This integration into and acceptance by local people allows MARSOC teams to have a long-term influence on the stability of a region, thus reducing the effects of religious fundamentalism and economic crises. MARSOC continues to expand its role in developing and deploying Marines and sailors with the critical skills that allow them to embrace unconventional warfare and integrate all of their capabilities to achieve success on the unconventional battlefield.

The special operations teams of MARSOC epitomize the adage, which became popular under USMC general James Mattis, "No better friend, no worse enemy." Marines who come to MARSOC are focused, purpose driven to be the best of the best, and often they are looking for a new

challenge. MARSOC is more than capable of providing all of those things, along with a new and different tool kit to meet those challenges. The specialized training they receive teaches the Marines how to use these new tools to their greatest capacity. As the United States continues to prosecute the war on terrorism around the globe, MARSOC continues to ensure that its people are prepared to accomplish the challenging and dangerous tasks to which they are assigned. MARSOC's warrior ethos and battlefield valor has earned the new unit the respect of its brothers in SOCOM. While the enemy counts how many they have killed to prove victory, MARSOC Marines focus on ensuring that their missions are accomplished with the fewest friendly casualties, and they return home.

The members of MARSOC proudly serve shoulder to shoulder with their fellow special operators of SOCOM. Yet, they remain Marines first: always faithful, always forward, silent warriors . . . oorah!

Marines with 3rd Marine Special Operations Battalion blast an opening through a mock wall during explosive breaching refresher training at Camp Lejeune. MARSOC critical skills operators constantly sharpen their skills for future operations. USMC PHOTO, LANCE CPL. THOMAS W. PROVOST

A Marine pulls security near a poppy field in Peyo as Marines and Afghan soldiers patrol through the village in the Bala Baluk district in Afghanistan's Farah province. As the sun sets, another day of fighting comes to an end. For those engaged in the global war on terrorism, it is only the day that ends. Fighting continues in the mountains of Afghanistan, deserts of Iraq, and jungles and urban battlefields around the world—everywhere terrorists call home. The Marines of MARSOC will continue to fight in "every clime and place," until the enemy is brought to justice, or justice brought to the enemy. USAF PHOTO, STAFF SGT. NICHOLAS PILCH

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## ABBREVIATIONS

| | |
|---|---|
| CAS | Close air support |
| CSAR | Combat search and rescue |
| CSO | Combat skills operators (a.k.a. door kickers) |
| CSS | Combat service support |
| CQB | Close quarters battle |
| DA | Direct action |
| DCS | Direct combat support |
| DOD | Department of Defense |
| DZ | Drop zone |
| E&E | Evasion and escape |
| EOD | Explosive ordnance disposal |
| FEBA | Forward edge battle area |
| FOB | Forward operation base |
| FOL | Forward operating location |
| FRIES | Fast rope insertion/extraction system |
| GMV | Ground mobility vehicle |
| GPS | Global positioning system |
| HAHO | High altitude high opening |
| HALO | High altitude low opening |
| HE | High explosive |
| HE/DP | High explosive dual purpose |
| HRST | Helicopter rope suspension training |
| HET | Human exploitation team |
| HLZ | Helicopter landing zone |
| HUMINT | Human intelligence |
| INTREP | Intelligence report |
| JCS | Joint chiefs of staff |
| JTAC | Joint terminal attack controller |
| LOS | Line of sight |
| LZ | Landing zone |
| MARSOC | Marine special operations command |
| MSOB | Marine special operations battalion |

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|---|---|
| MSOC | Marine special operations company |
| MSOR | Marine special operations regiment |
| MSOS | Marine special operations school |
| MSOT | Marine special operations team |
| MARFORLANT | Marine forces, Atlantic |
| MARFORPAC | Marine forces, Pacific |
| MARFORRES | Marine forces, Reserve |
| MIB | Marine special operations intelligence battalion |
| MRE | Meal, ready to eat |
| NEC | Navy enlisted code (Navy version of MOS) |
| NOD | Night optical device |
| NVD | Night vision device |
| NVG | Night vision goggles |
| OPCON/M | Operational control/command |
| OPSEC | Operational security |
| PALS | Pouch attachment ladder system |
| ROC | Reconnaissance operating center |
| RECON | Reconnaissance |
| SEAL | Sea air land (U.S. Navy Special Operations Forces) |
| SAR | Search and rescue |
| SASR | Special applications scoped rifle |
| SERE | Survive, evade, resist, and escape |
| SF | Special Forces (U.S. Army) |
| SIGINT | Signal intelligence |
| SOCOM | Special Operations Command |
| SOF | Special Operations Forces |
| SOFLAM | Special Operations Forces laser acquisition marker |
| SPIES | Special procedure infiltration/extraction system |
| STX | Situational tactical exercise |
| SWS | Sniper weapon system |
| WMD | Weapons of mass destruction |

## TERMINOLOGY ("MARINE SPEAK")

| | |
|---|---|
| Aft | Referring to or toward the stern (rear) of a vessel. |
| All hands | All members of a command. |
| Astern | To the rear, or behind you. |
| As you were | Resume activity. |
| Aye, Aye, Sir | Correct form to acknowledge a direct order. Naval custom. |
| Bivouac | Term for a camp area in the field. |
| Bulkhead | A wall. |
| C-4 | Plastic explosive. |
| Carry on | The order to resume previous activity. |
| Claymore | Antipersonnel mine, 700 steel balls packed in C-4. |
| Cobra | Helicopter gunship. |
| Corpsman or Doc | A Marine or naval term for "medic." |
| Cover | Any form of headgear other than a helmet. |
| Det cord | Detonating cord; thin, flexible plastic tube packed with explosive (PETN); explodes at 25,000 fps. |
| Fast movers | Marine, Navy, or Air Force jet fighters or fighter/bombers. |
| Field Day | Thorough cleaning of a room or area. |
| Fighting hole | A position dug in the ground to provide cover and concealment, not the same as foxhole. |
| Fire team | The second smallest tactical unit in the Corps; the smallest is the individual rifleman. |
| FMF | Fleet Marine Force. |
| Galley | Shipboard kitchen; kitchen of a mess hall; mobile field kitchen. |
| Grunt | A Marine infantryman. |
| Gung-Ho | Chinese term for "working together"; understood as the team spirit. |

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|---|---|
| Hatch | Door or doorway. |
| Hootch | Anything from a tent to a wooden hut. |
| Huey | Slang for UH-1 helicopter; used for troop or cargo transport. |
| Junk on the bunk | During inspection, a Marine lays out gear and uniforms on a flat surface, such as a bunk. |
| Ka-Bar | A Marine's fighting knife. |
| Klick | Military slang for a kilometer; 1,000 meters or 0.62 mile. |
| LZ | Landing zone. |
| MOS | Military occupational specialty; a Marine's primary training (e.g., 0300 [infantry], 0200 [intelligence], etc.). |
| Mustang | An enlisted Marine who has obtained an officer commission. |
| NCOIC | Noncommissioned officer in charge. |
| Oorah! | USMC response, cheer, affirmative, ready for action, etc. |
| Point | Also "point man"; the Marine at the head of a patrol, the first guy in line. |
| Rack | A bed. |
| Report | Presenting yourself or a group for which you are responsible to a superior. |
| Secure | To complete or end work on a project, or the day's work. |
| SitRep | Situation report. |
| Squared away | Someone or something that makes a good impression. Well maintained uniform or a successful exercise. |
| Stow | Put away. |
| Tail-end Charlie | Last man of a patrol; also called drag. |
| Topside | Upstairs. |
| 782 gear | The equipment a Marine carries in the field, including ALICE pace, web belt, suspenders, ammunition pouches, canteens, etc. Also called deuce-gear. |

# U.S. AIR FORCE SPECIAL OPS

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Chapter 1

# THE QUIET PROFESSIONALS

A clandestine MC-130H Combat Talon II glides through the slipstream at twenty-five thousand feet above enemy territory, its forward-looking infrared and array of electronic equipment constantly on the lookout for hostiles. Time hack, 0215; the pilot brings the aircraft to twelve thousand feet. An arm shoots up into the air and the nomex-gloved hand spreads out, signaling to the team they are five minutes from the insertion point.

Moments later the rear cargo ramp is lowered and three heavily laden figures in battle dress uniform (BDU) and parachutes approach the opening. They huddle together like an NFL team before the final play of the game. Last-minute checks are made, and equipment is tugged one more time. One member reaches down and gives a reassuring pat to the M4A1 carbine with suppressor attached to his harness; another glances one last time at his altimeter.

GREEN . . . GREEN . . . GREEN, the jump light flashes and in a heartbeat all three men, as one, hurl themselves into the dark abyss that waits for them. Assuming a stable free-fall position, they are plummeting to the earth's surface, now eleven thousand feet below, at approximately two hundred feet per second. The only sound heard is their breathing through the oxygen masks and the wind as it tears at their bodies and equipment. Moments turn into an eternity; then it is time. The altimeter now dictates that they transcend from their lofty flight and prepare to engage their RAPS, or ram-air parachute system. One final check of the altimeter and compass. As they reach the thirty-five hundred–foot point, one after the other pulls on the rip cord. Only the sounds of the canopy foils being deployed are heard by the team. In little more than two minutes after leaving the aircraft, they are ready to steer toward their landing zone.

The landing zone (LZ) is about the size of a basketball court, and each of the men perform stand-up landings as they hit the target. They quickly remove their chutes and bring their weapons up to the ready positions. Silently the point man moves up onto a rocky crag. Stops. Listens. Surveys the area. Listens again. After he is satisfied that they have arrived undetected, he directs his attention back to the rest of the team and with a deliberate, silent hand motion signals to them to converge on the point man's position.

The team leader pulls out a global positioning system (GPS) and verifies the location and direction to the target. The information is passed on to the point man who sets a compass heading and heads out. The team moves through the mountainous terrain and scraggly trees like an invisible zephyr.

After traveling more than an hour, the team assumes a potion atop a ridgeline, where they begin to break out their equipment. An AN/PRC-117F radio is pulled from one rucksack, from another a SATCOM antennae. A few feet away a Special Operations forces laser aiming module is set up. While this high-tech gear is being set up, the other team member provides security with his MK46 machinegun. With two hundred rounds of linked 7.62mm ammunition, he is ready to defend the team's position.

The team settles in, but their wait is not long. The intelligence from the local contact is right on, and soon winding down the mountain pass below them is a convoy of Toyota pickup trucks. Using night-vision equipment, the team leader verifies the al-Qaeda target and gives a nod to "paint" the lead vehicle. The SOFLAM begins to emit a chirping as the operator holds the cross hairs on the four-wheel-drive pickup. The seconds tick by, then out of an ebony sky a five hundred–pound MK-82 bomb homes in on the lead vehicle, turning the night into day, as flames streak skyward. Before the trail vehicle can turn around, another MK-82 converts it into scrap metal. With the three middle trucks now trapped in between, the occupants leap from the vehicles, but there is nowhere to hide, as overhead an AC-130U "Spooky" gunship metes out death from its 40mm Bofors and 25mm Gatling gun.

**Left:** One of the Pave Low's gunners readies the M2 .50-caliber machine gun. With a shell more than five inches in length, it is a formidable weapon against troops, bunkers, and soft-skinned vehicles, such as APCs.

Before the echo fades from the night, the team has already packed up and radioed for extraction. Just as the last man shoulders his rucksack, there is a familiar sound of rotor blades beating against the night air, as an MH-53 Pave Low looms out of the darkness. Their mission complete, the team loads onto the huge helicopter and heads back to the forward operation base (FOB).

Who are these men?

They are not U.S. Navy SEALs, but they may have marked the area with infra-beacons before the frogmen fast-roped in. They are not U.S. Army Rangers, but before the Rangers ever executed an air drop on a drop zone this team might have been there for days.

You will not see them depicted in movies with guns blazing or as the main characters in the latest Clancy novel. They prefer their anonymity and are often the unsung heroes of many covert operations. They are the men of the U.S. Air Force Special Operations Command, the Air Commandos, the Quiet Professionals. Their motto: ANYTIME, ANYWHERE.

The origins of these Quiet Professionals can be traced back to the beginning of World War II. Aircrews and aircraft were used in the clandestine, unconventional, and psychological warfare roles in both the European and Pacific theaters of operation.

The Combat Talon of today would find its forerunner in the highly modified, paint-blackened B-24 "Liberator" bombers. These specialized B-24s were flown by members of the 801st Bombardment Group, Army Air Corps who were known as the Carpetbaggers. The crews of this unit, much like their current descendants, became proficient in flying low-level, long-range missions in terrain that was mostly

The bomber was operated by the 801st Bombardment Group, nicknamed the "Carpetbaggers." This group specialized in covert air operations.
An ancestor of today's Combat Talons, operating mostly at night, these highly modified, black-painted aircraft were utilized in the delivery of supplies, OSS agents, and leaflets behind enemy lines in Europe. *AFSOC*

mountains in poor weather and, of course, at night. These planes were instrumental in the delivery of covert agents, supplies, and psychological leaflets behind the enemy's lines.

The agents who would be parachuted into enemy-held territory were members of the Office of Strategic Services (OSS). Known as Jedburgh teams, these teams generally consisted of three men and would link up with the partisan resistance fighters and organize and conduct guerrilla operations against the Germans in preparation of Operation Overlord.

In the early part of June 1944, six Jedburgh teams were parachuted into strategic locations in Brittany and France. There, units were successful in relaying critically needed intelligence in preparation for the Allied invasion of Normandy, on 6 June 1944—D-day.

On another occasion, Air Corps special operations aircrews were tasked with the insertion of OSS agents into Yugoslavia, codename Halyard Mission. These agents, in connection with the partisans, arranged for the return of downed aircrews. Between June and August 1944 these OSS teams, along with help from the partisans, recovered more than four hundred Americans and eighty Allied personnel. They were transported out on Air Corps C-47 transports from covert airfields.

## *World War II in the Pacific*

While the OSS Jedburgh Teams were successfully conducting guerrilla operations in Europe, other aircrews were earning their namesake in the Pacific.

On 26 August 1943, Gen. Henry H. "Hap" Arnold held a meeting with British Admiral Lord Louis Mountbatten to review plans for American air assistance of British commando operations in the China-Burma-India theater of operations. It was during this time that General Arnold brought into being the concept of a new force, a highly mobile fighting unit, complete with its own transportation and logistics. This unit, which would exhibit the "can-do" spirit, would evolve into the No. 1 Air Commando Group. General Arnold used the term "air commando" to honor Lord Mountbatten, who had previously commanded British commandos.

During its formation, this unit was initially designated Project 9, then Project CA 281. Later the name was changed to the 5318th Provisional Unit (Air), then once again to No. 1 Air Commando Force, and finally, the 1st Air Commando Group (1 ACG) in March 1944.

The task of forming this unit fell upon two veteran fighter pilots, Lieutenant Colonels Philip G. Cochran and John R. Alison. They were to build a self-sufficient, highly motivated combat unit to support British Brig. Gen. Orde C. Wingate and his "Chindits" on long-range infiltrations into Burma, opposing the Japanese.

Cochran and Alison were designated co-commanders and given carte blanche by General Arnold. Their orders were simple: ". . . I want the USAAF to spearhead General Wingate's operation." Then the general gave them a further admonition: "To hell with the paperwork, go out and fight."

For such an organization, there was no table of organization and equipment (TO&E). Under the highest priority given to them by General Arnold, they were able to obtain the needed men and supplies to create the unit.

The task of manning the unit fell to Capt. Robert E. Moist. Due to the covert nature of their mission, prospective candidates were given a minimal amount of information. No information regarding destination, but they were assured that missions would include combat. The attraction of combat and secrecy of the missions was enough to fill the ranks and made recruiting easy. In keeping with the nature of secrecy, the unit adopted the unofficial patch of a black question mark on a white circle.

With the manpower problem solved, Cochran and Alison now directed their attention to the aircraft needed to accomplish their mission. The inventory of aircraft grew, and soon they had at their disposal C-47 Dakota Transports, CG-4A Waco gliders, P-51 Mustangs and P-47 Thunderbolt fighters, B-25 Mitchell bombers, UC-64 Norseman utility aircraft, L-1 Vigilant and L-5 Sentinel liaison planes, and for the first time in a combat environment, the YR-4 helicopter.

The air commandos flew over hazardous mountains and jungles to find and resupply the highly mobile British ground forces in hostile territory. Their success eventually led to the creation of two other such groups, the 2nd and 3rd ACGs.

The mission of the 1st Air Commando Group as defined by General Arnold was to facilitate the forward movement of

Wingate's troops, to supply and evacuate Wingate's force, to provide limited air covering and striking force, and to acquire air experience under the conditions expected to be encountered.

Arnold's air commandos performed a variety of conventional and unconventional combat as well as support missions deep behind enemy lines. The air commandos are credited with the first combat aircrew rescue by helicopter, multiple ground targets destroyed, and a number of enemy aircraft shot down.

On 15 February 1944, during a night training mission, an accident involving a C-47 Dakota and two Waco gliders took the lives of four of Wingate's men as well as three Americans.

Such an incident could have easily shaken the men of the British force. On the following day, however, Wingate's commander sent a note to the air commandos reassuring their faith and trust in the unit's capability. The note read, "Please be assured that we will go with your boys Any Place, Any Time, Any Where." This phrase became the motto of the 1st Air Commando Group and has been used in one variation or another in subsequent Air Commando units as well as by today's Air Force Special Operations Command.

### *Post–World War II and Korea*

With the end of World War II the U.S. military underwent many changes. The OSS evolved into the Central Intelligence Agency (CIA). The Army Air Corps became the U.S. Air Force, and the Air Commando Group was officially deactivated.

Officially, the U.S. Air Force no longer had an unconventional warfare capability. Unofficially, however, with the entrance of the United States into the Korean War, the USAF found itself again running clandestine operations, this time for the newly formed CIA. Under direction of the Military Air Transport Service (MATS), the Air Resupply and Communications Service (ARCS) was created on 28 February 1951. ARCS would be responsible for many of the covert operations of the war.

As their predecessors before them in World War II, those who flew and fought in Korea would pass along the heritage as they passed along their addition to the Air Commando legacy.

### *Cold War Era*

With the end of the Korean War, the primary mission of the U.S. Air Force would be that of land-based bombers and intercontinental ballistic missiles of the Strategic Air Command. Once again, the U.S. Air Force's special operation would silently slip away into the shadows, until needed. Throughout the 1950s the U.S. Air Force was tasked with supporting anti-Communist rebellions.

### *Vietnam*

Early on in the sixties, the Cold War began to heat up, primarily in Third World countries where Communist-led insurgents introduced a violent movement to those areas. Known as "Wars of Liberation," they sprung up all around the globe. Obviously, this caused great concern in the United States and other Western nations.

President John F. Kennedy had developed an interest in counterinsurgency, the method of defeating guerrilla movements. He would go on to say, "There is another type of war, new in its intensity, ancient in its origins—war by guerrillas, subversives, insurgents, assassins, war by ambush instead of combat. . . ." President Kennedy recognized a need for a force, a "special" force to counter this threat.

The U.S. Air Force response came in the spring of 1961, when Gen. Curtis E. LeMay, Air Force Chief of Staff, directed the creation of the 4400th Combat Crew Training Squadron (CCTS), codename "Jungle Jim." Located at Eglin Air Force Base, Auxiliary Field No. 9 (Hurlburt Field), the 4400th CCTS started its journey into the annals of Special Warfare history with 352 officers and men and a total inventory of thirty-two aircraft (sixteen C-47 transports, eight B-26 bombers, and eight T-28 trainers).

The mission of the 4400th CCTS was to provide close air support for Special Forces behind enemy lines and counterinsurgency training. The CCTS developed foreign internal defense (FID) tactics and techniques for building a counterinsurgency capability in numerous Third World countries.

Later that year, in November 1961, Detachment 2 of the 4400th CCTS, codename "Farm Gate," deployed to the Republic of South Vietnam. They were to become the first U.S. Air Force unit to conduct actual combat operations in

A Fulton recovery balloon breaks away from an MC-130E Combat Talon aircraft during an interception. This device, known as a "Skyhook," allowed the extraction of Special Operations forces teams. Up to five hundred pounds of personnel and equipment could be attached to a balloon via a nylon line. As the Combat Talon approached, the yoke arms or "whiskers" were extended to snag the line. The balloon would then break away and the line would feed into an attached power winch in the rear of the aircraft. The individuals or cargo would then be reeled into the aircraft via the ramp door. *U.S. Air Force*

Vietnam. As the war in Vietnam expanded, so did the role of the U.S. Air Force's Special Operations forces. General LeMay responded to this in the expansion of the 4400th CCTS to the Special Air Warfare Center (SAWC) at Eglin in April 1962. SAWC consisted of the 1st Air Commando Group, 1st Air Combat Applications Group, and a combat support group. To assist the new organization, the air force created a new "counterinsurgency" office specialty code.

In May 1963, the 1st Air Commando Group was redesignated the 1st Air Commando Wing. Operational strength rose from 2,665 to 3,000 and the squadrons increased to six. In the tradition of their predecessors, the Vietnam-era Air Commandos developed tactics and techniques that earned their exploits an honored place in Air Force Special Operations heritage. Their dedication and courage was recognized in the fact that out of the twelve U.S. Air Force Medals of Honor, five would be awarded to members of the Air Force Special Operations.

As the Vietnam War began winding down, SOF capability progressively declined as well. In June 1974, USAFSOF was redesignated the 834th Tactical Composite Wing (TCW), effectively bringing to a close the most aggressive, far-reaching effort by the USAF to support unconventional warfare. In July 1975, the 834th TCW was renamed the 1st Special Operations Wing (1 SOW), and by 1979 it was the only SOF wing.

Chapter 2

# THE ORIGIN OF AIR FORCE SPECIAL OPS

What began as a noble attempt by the U.S. Special Operations forces ended in tragedy in the darkness of an Iranian desert. It was April 1980 when Special Forces Operation Detachment Delta, better known as "Delta Force," along with its U.S. Air Force and marine aircrews, met with disaster. What Colonel "Charging" Charlie Beckwith did not know at the time was that the operation was headed toward disaster from the onset. Over the years there have been investigations, hearings, and countless articles written on why the mission ended in a debacle, so we will not belabor the issue here. All the Monday-morning quarterbacks had one conclusion in common, however, Operation Eagle Claw failed. This cost the lives of eight gallant troops, it cost the honor of the United States of America, and it hurt the credibility of U.S. special operations.

The U.S. Navy helicopters with marine pilots proved to be the Achilles' heel of Operation Eagle Claw. One can only speculate on the compilations of mishaps that besieged the Sea Stallion helicopters. Some got lost in the desert and others malfunctioned, leaving the anxious force without the adequate airlift capability necessary to accomplish the rescue attempt. From the inception of the plan they were "the" weak link. Were the pilots up to the task?

The marine pilots, if we look at today's standards, had big boots to fill. They were being asked to fly at night. This alone was unusual practice for the "flying leathernecks." These pilots were now being asked to perform the extraordinary: launch off the deck of a carrier, at night, fly NOE (nape of the earth) where radar could not detect them, and use no running lights. The pilots were issued PVS5 night-vision goggles; however, they could be worn only at thirty-minute intervals. This meant the pilot and co-pilot had to alternate flying the huge helicopter every thirty minutes. The marines had no pilots that had been trained in this type of flying. In fact, none of the service branches were prepared for such a contingency.

Following the disaster at Desert One, a review committee known as the Holloway Commission convened to look into problems within U.S. special operations. The outcome of this commission resulted in two major recommendations. First, that the Department of Defense should establish a counterterrorism task force (CTJTF) as a field organization of the Joint Chiefs of Staff (JCS) with a permanently assigned staff and forces. The JCS would plan, train for, and conduct operations to counter terrorist activities against the United States. The CTJTF would use military forces in the counterterrorism (CT) role. These forces could range in size from small units of highly specialized personnel to larger integrated forces. Second, the JCS should consider the formation of a Special Operations Advisory Panel (SOAP). This panel would consist of high-ranking officers to be drawn from both active service and retired personnel. The prerequisite for selection was a background in special operations or having served as a commander in chief (CINC) or JCS level and having maintained a proficient level of interest in special operations or defense policy.

The mission of the SOAP would be to review and evaluate highly classified special operations planning to provide an independent assessment. Consequently, the progressive reorganization and resurgence of U.S. Special Operations forces began.

While this was occurring, the U.S. Air Force transferred responsibility for Air Force Special Operations from Tactical Air Command (TAC) to Military Airlift Command (MAC) in December 1982. The commander of the 23rd Air Force at Scott Air Force Base, Illinois, would assume all control of the Air Force Special Operations units. This new numbered U.S. Air Force was tasked with the worldwide missions of special

**Left:** In addition to providing air support for U.S. Special Operations forces, AFSOC would provide ATC and pararescue capabilities for USSOCOM. Here, Staff Sgt. Bob Benton of the 23rd Special Tactics Squadron, pauses and watches over his team as they take a break from patrolling through the dense jungle. He is armed with a GUU-5/P assault rifle with M203 40mm grenade launcher in hand, ready for instant use, should the need arise.

An HC-130 Hercules refuels two of the 20th Special Operations Squadron's HH-53 helicopters. These forerunners of today's MH-53 Pave Low helicopters are officially known as Sea Stallions but were nicknamed "Super Jolly Green Giants" or "Super Jollies" for their large green airframes. Marine-flown variants comprised the rotary wing element of Operation Eagle Claw. While there were numerous factors leading to the devastating failure of the operation, one of the most significant was the range of the helicopters. It was clear that U.S. Special Operations forces needed longer range heliborne capability for the insertion and extraction of its operators. *U.S. Air Force*

operations, combat rescue, pararescue training, medical evacuation, and training of HC-130 and helicopter crewmen.

Subsequently, on 1 March 1983, in response to the Holloway Commission Report, all U.S. Air Force Special Operations forces were consolidated into the 1st Special Operations Wing (SOW) at Hurlburt Field, Florida. The 1st SOW would direct and coordinate active and reserve components of the Special Operation Squadrons (SOS). Active components consisted of the 8th SOS operating MC-130 Combat Talons and HC-130 Hercules tankers, the 16th SOS operating AC-130 Spectre gunships, and the 20th SOS operating the MH-53 Pave Low and HH-53 Jolly Green Giant helicopters. The 1720th Special Tactics Group provided the combat control teams.

Reserve components of U.S. Air Force Special Operations forces included the 919th Special Operations Group (SOG) operating AC-130A gunships, the 302nd SOG operating the EC-130E command and control aircraft, and the Pennsylvania Air National Guard flying the Volant Solo EC-130E psychological operations (PSYOP) aircraft.

In addition to traditional special operations skills, the 23rd conducted weather reconnaissance, security support for intercontinental ballistic missile sites, and training of USAF helicopter and HC-130 crewmen.

## *Operation Urgent Fury*

In October 1983, 23rd AF participated with other Caribbean forces in the successful rescue of Americans from the island nation of Grenada. During the seven-day operation, centered at Point Salines Airport, 23rd AF furnished MC-130s, AC-130s, and EC-130 aircraft, aircrews, maintenance, and support people.

During the Grenada operation the 1st Special Operations Wing had two missions. MC-130 Combat Talons were

tasked with delivering U.S. Army Rangers to Point Salines, while Spectre gunships provided the air-to-ground support fire. Combat controllers were air-dropped in with the U.S. Army Rangers at Port Salinas airport, making an unprecedented combat jump from only five hundred feet. Each controller was laden with parachute gear and more than ninety pounds of mission-critical equipment. Upon landing they quickly established a command and control radio net. They carried out air traffic operations for follow-on forces both at the airport and other in-country missions. In addition to this, the combat control teams (CCT) performed as forward air control (FAC) for U.S. Air Force Spectre gunships, Navy fighters, and Army helicopter gunships.

Throughout the operation the crews of the 1st SOW continued in the tradition of the Air Commandos who preceded them. Flying in numerous sorties and fire missions they performed mission after mission. During the entire operations, they sustained no casualties.

The Grenada operation was not without its cost to the special operations community. Four U.S. Navy SEALs were lost at sea during a Rubber Duck insertion. This tragedy hit the SOF community hard. Operation Urgent Fury was also fraught with planning problems from the get-go. A lack of standardization for the special operation assets contributed to this plan gone awry.

Special Operations forces in Grenada did have a few rough edges; however, most of these planning problems were overcome as the special operations personnel from all three service branches excelled at what they do best: improvise, adapt, and overcome to achieve their missions' goals.

The Grenada mission was the springboard for the further consolidation of U.S. Special Operations forces. The U.S. Air Force particularly took a proactive stance to rebuild a powerful special operations force. In May 1986, Congressman William Cohen, Senator Sam Nunn, and Congressman Dan Daniel introduced legislation that formed the basis to amend the 1986 Defense Authorizations Bill. This bill, signed into law in October 1986, in part directed the formation of a unified command responsible for special operations. In April 1987, the United States Special Operations Command (USSOCOM) was established at

Hurlburt Field, located west of Eglin AFB, is the home of the U.S. Air Force Special Operations Command.

MacDill Air Force Base, Florida, and U.S. Army Gen. James J. Lindsay assumed command. Four months later, 23rd Air Force moved to Hurlburt Field.

In August 1989, Gen. Duane H. Cassidy, MAC commander in chief, divested all nonspecial operations units from the 23rd Air Force. Consequently, the 23rd Air Force served in a dual role—reporting to MAC, but also functioning as the air component to USSOCOM.

## *Operation Just Cause*

On 20 December 1989, at 0100 local, the United States launched an attack on Panama. The objectives of the attack were to protect U.S. personnel and installations, neutralize the Panamanian Defense Force, and capture Manuel Noriega. During this operation the Air Force Special Operations units saw extensive use. Due to the surgical firing capability, the AC-130 gunships were the ideal solution for the close-in urban combat environment with limited collateral damage. The gunships were launched from the 16th Special Operations Squadron ("Ghostriders") at Hurlburt Field, Florida.

Other Air Force Special Operations assets included an EC-130 from the 193rd ANG stationed at the Harrisburg Airport, Pennsylvania, to perform psychological warfare operations during the invasion. Pararescuemen and CCTs participated in operations with the U.S. Army's 75th Rangers at

Torrijos Airfield and Rio Hato Air Base. Combat controllers would also be attached to U.S. Navy SEAL Team 4 in support of the frogmen as they assaulted Paitilla Airport and disabled Noriega's personal jet.

In retrospect, Operation Just Cause served as a proving ground for the 1991 war in the Middle East. Night tactics and stealth weapons were battle tested in Panama and later accounted for many of the successes in Desert Storm. While not quite the fiasco of the Grenadian assault in 1983, Operation Just Cause did have some serious problems. Talk to the SEALs who survived the raid at Paitilla Airport. The invasion of Panama also established a strategy in the way U.S. Special Operations forces were deployed and used in the future.

## *The Birth of Air Force Special Operations Command (AFSOC)*

On 22 May 1990, Gen. Larry D. Welch, U.S. Air Force Chief of Staff, redesignated 23rd Air Force as Air Force Special Operations Command (AFSOC). AFSOC became responsible for the combat readiness of Air Force Special Operations forces. Headquartered at Hurlburt Field, Florida, the group reports directly to the U.S. Air Force Chief of Staff and is the air force's component of the U.S. Special Operations Command.

Subdued patch of the Air Force Special Operations Command.

The new major command consisted of three wings, the 1st, 39th, and 353rd Special Operations Wings, as well as the 1720th Special Tactics Group, the U.S. Air Force Special Operations School, and the Special Missions Operational Test and Evaluation Center. The Air Reserve components included the 919th Special Operations Group (U.S. Air Force Reserve) at Duke Field, Florida, and the 193rd SOG (Air National Guard) at Harrisburg Airport, Pennsylvania.

Today, having undergone further evolutions, AFSOC has approximately twenty thousand active, reserve, National Guard, and civilian personnel. The command owns more than 160 fixed- and rotary-wing aircraft, divided among one wing, the 16th SOW, and two groups, the 352nd and 353rd SOG. This configuration epitomizes the consolidated wing/group concept.

AFSOC is the U.S. Air Force element of the United States Special Operation Command (USSOCOM). Its mission is to provide mobility, surgical firepower, covert tanker support, and special tactics teams. These units will normally-operate in concert with U.S. Army and U.S. Navy Special Operations forces, including Special Forces, Rangers, Special Operations Aviation Regiment, SEAL teams, PYSOP forces, and civil affairs units. AFSOC supports a wide range of activities from combat operations of a limited duration to longer-term conflicts. They also provide support to foreign governments and their military. Dependent on shifting priorities, AFSOC maintains a flexible profile allowing it to respond to numerous missions.

AFSOC is committed to continual improvement to provide Air Force Special Operations forces for worldwide deployment and assignment to regional linked commands to conduct unconventional warfare, direct action, special reconnaissance, personnel recovery, counterterrorism, foreign internal defense, psychological operations, and collateral special operations activities.

## *16th Special Operations Wing*

Located at Hurlburt Field, the 16th Special Operations Wing is the oldest and most experienced unit in AFSOC. It

includes: the 3rd SOS (Dragons), which flies the Predator unmanned aerial vehicle; the 4th SOS (Ghostriders), which operates the AC-130U Spooky gunships; the 6th Special Operations Squadron, which is responsible for the SOW's aviation foreign internal defense unit; the 8th SOS (Blackbirds), which flies the MC-130E Combat Talon; the 9th SOS (Night Wings) flying the MC-130E Combat Talon I; the 15th SOS, with the MC-130H Combat Talon II; the 16th SOS, equipped with the AC-130H Spectre gunship; the 319th SOS operating the U-28A aircraft, and the 20th SOS (Green Hornets), which flies the MH-53J Pave Low III helicopter.

In addition to Hurlburt Field, in June 2006 AFSOC began evaluation of Cannon Air Force Base, New Mexico, as the new home for an Air Force Special Operations wing, scheduled for October 2007. Due to the historical lineage, the 16th Special Operations Wing flag will transition to Cannon, and Hurlburt Field will regain its designation as the 1st Special Operations Wing. And will continue as the headquarters of Air Force Special Operations Command.

According to Lt. Gen. Michael W. Wooley, AFSOC commander, "The AFSOC expansion to Cannon offers special operators a western U.S. base to enhance support for its operations in the Pacific theater and to meet the objectives of our global defense posture. Additionally, the Melrose Range and the surrounding region open up new and unrestricted training opportunities AFSOC does not currently experience, to include joint and composite training with other services and nations, as well as mission training opportunities. Cannon basing of AFSOC assets enables the special operations community easy access to a high desert training environment much like that encountered in contingency operations."

The growth in AFSOC weapons systems and personnel will be divided between Hurlburt Field and Cannon AFB. New aircraft, including the CV-22 Osprey, will be assigned to

Members of the 6th SOS specialize in foreign internal defense to train, advise, and assist the air forces of foreign countries. While the majority of SOF pilots have transitioned to the "glass cockpit," the pilots assigned to the 6th remain proficient in the use of the old "steam gauges" of older aircraft; several imprinted in Russian or other languages. Their inventory includes vintage aircraft that they may encounter in a Third World country (e.g., old C-47 transports, Hueys, and an assortment of Soviet aircraft). *U.S. Air Force*

Hurlburt/Eglin as well as to the new wing at Cannon. Other potential aircraft for Cannon are AC-130U Gunships and the MC-130H Combat Talon II. As of this writing the final aircraft mix between Cannon and Hurlburt Field has not been finalized.

### *352nd Special Operations Group*

Stationed overseas at RAF Mildenhall, United Kingdom is the designated U.S. Air Force component for Special Operations Command Europe. Its squadrons are the 7th SOS, which flies the MC-130H Combat Talon II; the 21st SOS, equipped with the MH-53J Pave Low; and the 67th SOS, with the HC-130N/P Combat Shadow and the 321st Special Tactics Squadron.

### *353rd Special Operations Group*

Residing at Kadena Air Base, Japan, is the U.S. Air Force component for Special Operations Command Pacific. The squadrons are the 1st SOS, which flies the MC-130E Combat Talon I; the 17th SOS, with the MC-130N/P Combat Shadow; and the 31st SOS at Osan Air Base, Korea, which flies the MH-53J Pave Low III helicopter.

### *720th Special Tactics Group*

Headquartered at Hurlburt Field, the 720th Special Tactics Group has units in the United States, Europe, and the Pacific. The group has special operations combat control teams and pararescue forces. Their missions include air traffic control for establishing air assault landing zones, close air support for strike aircraft and Spectre gunship missions, establishing casualty collection stations, and providing trauma care for injured personnel.

Its squadrons include the 21st STS at Pope Air Force Base, North Carolina; 22nd STS at McChord Air Force Base, Washington; 23rd STS at Hurlburt Field; the 24th STS located at Fort Bragg, North Carolina; and the 10th Combat Weather Squadron at Hurlburt Field.

### *Air Force Special Operations School*

Reporting directly to AFSOC and at Hurlburt Field, the school provides special operations–related education to Department of Defense personnel, government agencies, and allied nations. More than seven thousand students attend the school each year.

Activated in April 1967, the USAF Special Air Warfare School was located at Eglin Air Force Base. In 1968 it was redesignated the USAF Special Operations School. It was in 1987 when the school, then under the command of the 23rd Air Force, was assigned to the U.S. Special Operations Command (USSOCOM) at MacDill Air Force Base, Tampa, Florida. On 22 May 1990 the school became a direct report of the newly established Air Force Special Operations Command (AFSOC) at Hurlburt Field.

Curriculum enhances the mission readiness and force survivability. Subjects covered in its eighteen courses include introduction to special operations, regional affairs, cross-cultural communications, antiterrorism awareness, revolutionary warfare, joint psychological operations, joint special operations planning, joint aviation's foreign internal defense, and other classified areas.

### *18th Flight Test Squadron*

With headquarters at Hurlburt Field, the 18th Flight Test Squadron conducts operational and maintenance suitability tests and evaluations for equipment, concepts, tactics, and procedures for employment of Special Operations forces. Many of these tests are joint command and joint service projects.

### *919th Special Operations Wing (U.S. Air Force Reserve)*

The 919th Special Operations Wing is located at Duke Field, Florida, whose 711th SOS—which once flew the AC-130A gunships—have been transitioned over to the MC-130E Combat Talon I. The squadron trains in the deployment of Special Operations forces or mission-critical equipment, day or night, at low levels into denied or hostile areas of operations. The 5th SOS flies the HC-130N/P Combat Shadow tanker. This unit flies clandestine missions into sensitive territories to provide air refueling for special operations aircraft. Secondary missions include air dropping special operations teams and other equipment as needed.

AFSOC
COMMAND
PRIMARY SUBORDINATE UNITS
AIR FORCE SPECIAL OPERATIONS COMMAND
AIR FORCE SPECIAL OPERATIONS ORCES (AFSOF) RLBURT FLD, FL
16 SOW HURLBURT FLD, FL
193 SOW (ANG) HARRISBURG IAP, PA
USAFSOS HURBURT FLD, FL
353 SOG KADENA AB, JA
352 SOG RAF MILDENHALL, UK
18 FLTS HURLBURT FLD, FL
720 STG HURLBURT FLD, FL
919 SOW (AFRC) DUKE FLD, FL
(PREDATOR) BURT FLD, FL
4 SOS (AC-130U) HURLBURT FLD, FL
6 SOS (AVIATION FID, UH-1) HURLBURT FLD, FL
8 SOS (MC-130E) DUKE FLD, FL
9 SOS (MC-130E) EGLIN AFB, FL
22 STS McCHORD AFB, FL
23 STS HURLBURT FLD, FL
24 STS FT. BRAGG, NC
OS (MC-130H) BURT FLD, FL
16 SOS (AC-130H) HURLBURT FLD, FL
19 SOS HURLBURT FLD, FL
319 SOS (PC-12) HURLBURT FLD, FL
20 SOS (MH-53J) HURLBURT FLD, FL
10 COMBAT WEATHER SQ HURLBURT FLD, FL
21 STS POPE AFB, NC
S (MC-130H) ILDENHALL, UK
21 SOS (MH-53J) RAF MILDENHALL, UK
67 SOS (MC-130P) RAF MILDENHALL, UK
321 STS RAF MILDENHALL, UK
711TH SOS (MC-130E) DUKE FLD, FL
5TH SOS )MC-130P) EGLIN AFB, FL
1 SOS (MC-130H) KADENA AB, JA
17 SOS (MC-130P) KADENA AB, JA
320 STS KADENA AB, JA

## *193rd Special Operations Group (Air National Guard)*

Residing at Harrisburg International Airport, Pennsylvania, the 193rd is solely responsible for AFSOC's mission for providing airborne radio and television broadcasts. Flying the uniquely configured EC-130E Commando Solo aircraft, the unit can be deployed for PSYWAR operations during wartime or mobilized for humanitarian efforts in peacetime. Operating six of the Commando Solo aircraft, the 193rd can be deployed on a moment's notice around the globe. Anytime, anywhere.

## *123 Special Tactics Squadron (Air National Guard)*

The 123 STS, based at Standiford Field, Kentucky, stands ready to deploy combat controllers and pararescuemen around the world in support of the Global War on Terrorism. The National Guard members of the 123 were deployed widely into both OEF and OIF theaters of operations.

Chapter 3

# NEW MISSIONS

From early August 1990 to late February 1991, AFSOC participated in Operations Desert Shield and Desert Storm, the protection of Saudi Arabia, and liberation of Kuwait.

It was the Green Hornets Pave Lows of the 20th Special Operations Squadron that began the war in the Gulf. In October 1990, U.S. Commander in Chief Central Command (USCINCCENT) Gen. Norman H. Schwarzkopf had studied the multitude of maps, aerial and satellite imagery, and intelligence reports and pondered his next plan to action. It was the last week of the month when Col. Gary Gray of the 20th SOS met with the general. Colonel Gray briefed General Schwarzkopf on a plan called "Eager Anvil."

This plan intended for a flight of four MH-53 Pave Lows and an assault force of U.S. Army AH-64 Apache attack helicopters to execute the mission. The Pave Lows were equipped with FLIR, terrain avoidance radar, GPS, and other sophisticated electronics and navigational aids. They would cross into Iraq, leading the Apaches through the dark and over the featureless desert terrain to the target areas. Once on site the U.S. Army pilots in their Apaches would "take out" two enemy radar installations, simultaneously, with AGM-114 Hellfire laser-guided missiles. With these radar sites destroyed, a corridor opened for U.S. and Coalition aircraft to begin the air campaign.

So critical was this operation to the commencement of Desert Storm that General Schwarzkopf asked Colonel Gray, "Colonel, are you going to guarantee me one hundred percent success on this mission?" Colonel Gray looked at the general and answered, "Yes, sir." The USCINCCENT replied, "Then you get to start the war."

Lt. Col. Richard L. Comer was a little taken aback over Colonel Gray's commitment. Comer vowed that the mission would have to be perfect; he did not intend to make his boss a liar. He later commented, "This was the best joint helicopter flying operation I've ever seen." The Apaches were designed to shoot and destroy targets, and the Pave Lows were designed to get the AH-64s to the targets; it was a perfect match. The designation for the mission was Task Force Normandy. There were two formations of two MH-53Js and two AH-64s. One group was assigned to the eastern site, the other to the western-most installation.

AT 0212 TF Normandy crossed the border and entered Iraq. All of the training that the 20th had under their belts was now paying off. The helicopters sped through the pitch-black night flying no higher than 50 feet off the desert below. Relying on the Pave Lows' computers and sensors, the Green Hornets' pilots zigzagged around Nomad camps, down into wadis (a dry desert stream bed), flying NOE to stay under Iraqi radar. They staggered back and forth to avoid enemy observation posts.

The formations arrived on target, and at 0238 the sites were struck simultaneously by missiles. Within a span of four minutes, two Iraqi radar installations ceased to exist. The air campaign had begun. Another crucial mission conducted by AFSOC personnel was the placing of navigation beacons at various locations along the Saudi-Iraq borders. The STS teams working in conjunction with the 160 Special Operations Aviation Regiment (Airborne) carried out this task, which provided navigation guides for F-111 bombers going downtown (i.e., Baghdad).

Active-duty AFRES and ANG components of AFSOC were deployed to Saudi Arabia and Turkey: the 1st SOW with its AC-130s, HC-130s, MC-130s, MH-53s, and MH-60s; the 193rd SOG with its EC-130s; and the 919th SOG, with its AC-130s and HH-3s all deployed south of Kuwait.

**Left:** The special tactics squadron teams or STT are a combination of combat controllers, pararescuemen, and in some cases Special Operations weathermen. These battlefield airmen are the ground element of AFSOC, capable of being the "eyes and ears" of a theater commander. Here, members of the 23rd Special Tactics Squadron are armed with the Colt M4A1 and the M203, 40mm grenade launcher.

Navy Lt. Devon Jones, left, runs towards the Pave Low that rescued him during Operation Desert Storm. The 20th SOS conducted the first combat search and rescue since the Vietnam War. *U.S. Air Force*

The 39th SOW deployed north of Iraq with its HC-130s, MC-130s, and MH-53s. Special tactics personnel operated throughout the theater on multiple combat control and combat rescue missions.

Air Force Specials Operation Command combat control teams were responsible for all air traffic control in the Persian Gulf theater of operations during Operation Desert Shield; once the war transitioned to Desert Storm this task was handed off to conventional ATC units. In addition to this, other missions performed were direct-action missions, combat search and rescue, infiltration, exfiltration, air base ground defense, air interdiction, special reconnaissance, close air support, psychological operations, and helicopter air refueling.

## *Post–Gulf War Events*

Following the Gulf War, aircraft and personnel of the U.S. Air Force Special Operations Command stood alert for

This PJ walks point for his team, armed with a HK MP5, 9mm submachine-gun. The ever-watchful eyes of an STS team member provide cover for the team. Although the special tactics teams have transitioned to the M4A1 carbine, the MP-5 submachine-gun still can be found in the armories and may be used depending on the mission parameters.

personnel recovery and various other missions. In April 1991, Operation Provide Comfort provided humanitarian assistance in northern Iraq to Kurdish refugees after a revolt against the Iraqi government failed and more than a million Kurds fled into the mountains along the Turkey and Iranian borders. Additionally, Operation Southern Watch monitored the area of southern Iraq to ensure no incursion of Iraqi troops below the 32nd parallel. In July 1992, AFSOC units began participation in NATO Implementation Force (IFOR) operations in Bosnia.

Operation Provide Comfort gave humanitarian relief. During this operation more than fifteen tons of MREs were air-dropped. Operation Deny Flight enforced the no-fly zone and provided close air support to United Nations ground troops. In December 1992, AFSOC special tactics and intelligence personnel supported Operation Restore Hope in Somalia. In the spring of 1993, under Operation Continue Hope, humanitarian relief operations were secured with the help of AC-130H Spectre gunships. During this operation, special tactics team members would be operating with the Rangers from the 75th Ranger Regiment and Delta Force as part of Task Force Ranger.

The number of deployments following Operation Desert Storm was only exceeded by the number of organizational modifications. The more significant ones included the 353rd SOW relocation under Operation Fiery Vigil from Clark Air Base, Republic of Philippines, to Kadena Air Base, Japan, in June 1991 due to the volcanic eruption of Mount Pinatubo. The unit was supported by temporary duty personnel under Operation Scimitar Sweep for more than a year.

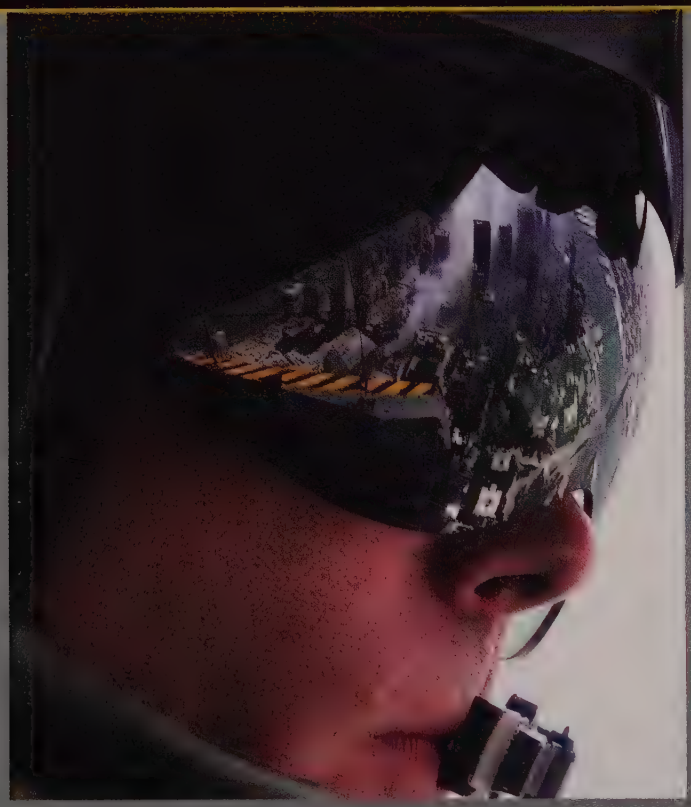
In January 1992, the 39th SOW relocated from Rhein-Main Air Base, Germany, to Royal Air Force Alconbury, United Kingdom, and later that year was inactivated and its personnel and equipment were reconstituted as the 352nd SOW. In December 1992, both overseas wings were redesignated as groups. During the summer of 1993 it was announced that the 352nd SOG would be moving again, this time to RAF Mildenhall.

More reorganization occurred on Hurlburt Field. The 1720th STGP became the 720th STG in March 1992. Ownership of Hurlburt Field was transferred from AMC to AFSOC in October 1992. This was followed by the merger of the 834th ABW into the 1st SOW, which assumed host unit responsibilities. A year later, the 1st SOW became the 16th SOW in a move to preserve U.S. Air Force heritage.

This Pave Low pilot from the 20th Special Operations Squadron (Green Hornets) wears his night-vision goggles in the down position, anticipating a mission to be executed under cover of darkness.

Chapter 4

# GLOBAL WAR ON TERRORISM



After the terrorist attacks of September 11, 2001, the operational tempo of the U.S. military went through the roof and USSOCOM went into overdrive to ensure there were boots on the ground. Among those first units deployed in the Global War on Terrorism (GWOT) were members of the Air Force Special Operations Command. Special tactics team comprised of combat controllers, pararescuemen, and combat weathermen were positioned to establish air heads, helicopter landing zones, drops zones, close air support, and a plethora of other tasks for which these battlefield airmen were amply suited, trained, and capable.

Move…shoot…communicate. A team of a special tactics squadron with vehicles ready for action in Operation Enduring Freedom. The mission of the STS operators is to plan, prepare, and, when directed, integrate, synchronize, and control the elements of air and space power to execute air missions in support of America's Global War on Terrorism. *U.S. Air Force*

**Left:** On September 11, 2001, AFSOC was on the scene shortly after the attack had taken place. In the visor you can see the World Trade Center. Tower One has already fallen and Tower Two can still be seen reflected in the visor of an MH-53 helicopter crewmember. AFSOC Pave Lows responded immediately to support relief efforts in New York City and Washington, D.C. Since the Global War on Terrorism began, 16 SOW aircraft have flown more than eleven thousand combat sorties, amassing more than thirty-eight thousand combat hours. *U.S. Air Force*

## *Operation Enduring Freedom*

The first assault launched by the United States in the Global War on Terrorism took place in October 2001. To make a statement, Rangers from the 75th Ranger Regiment performed an air drop into the Afghanistan night. This assault would launch the official start of America's response to the attacks the previous month. Prior to the deployment of the Rangers, a special operations weather team was on the ground. As the MC-130 Combat Talons, laden with Rangers headed for the drop zone, the combat weatherman reported on local conditions at the DZ.

Following the attack on America, one of the first U.S. Special Operations forces on the ground in Afghanistan was the special tactics teams. Here, combat controllers bring a C-17 transport into an undisclosed airfield during Operation Enduring Freedom. Their expertise in performing airfield surveys and assessments was invaluable in opening a functional airfield in the austere condition of the country. One combat controller remarked, "Anyone can land a plane once. The trick is having a usable runway and airfield." *U.S. Air Force*

An hour from the scheduled drop, reports arrived of heavy ground fog on the target. The call came down from the commander to abort the drop. The combat weatherman on the ground radioed back in with the message, "Wait one. This will clear up in about fifteen minutes." With this information the Combat Talons maintained their heading to the DZ. As the SOWT had forecasted the fog lifted; the ramps lowered on the MC-130 aircraft and the Rangers exited the Talons dropping them on Objective Rhino; a Taliban compound located in Khandahar.

While Operation Rhino was taking place, Special Forces Operations detachments, or A-teams, were covertly inserted into Afghanistan by helicopters. The mission of these soldiers from the five Special Forces Group was to link up with the Northern Alliance forces and take the fight to the Taliban. Accompanying each of the ODAs was a combat controller whose mission was to provide close air support for the team.

## *Kabul*

Flying in MH-53 Pave Lows, Operational Detachment Alpha 555, codename "Triple Nickel," was inserted into the Panjshir Valley, north of Kabul. Its mission was to join Northern Alliance and liberate the Afghanistan capital city from the Taliban. Accompanying ODA-555 was Master Sgt. William Calvin Markham, a combat controller assigned to the 23rd special tactics squadron. The AFSOC NCO was armed with an M-4 rifle and an eighty-pound pack loaded with tools of the trade.

As the team inserted, they encountered numerous individuals closing on their position. The team went into a defense posture, yet did not engage. As it turned out, the men coming toward them in the darkness were indeed members of the Northern Alliance who greeted the Americans and welcomed them to their country and the fight. As they observed the Taliban lines, they would discover it was a sixty-kilometer front line, with guns, anti-aircraft-artillery, mortars, and tanks. The mission of ODA-555 would be to break through the Taliban lines and capture Kabul, the Afghanistan capital city.

With the U.S. SOF team on the ground, the tide of the war was about to take a giant turn in favor of the Northern

Alliance forces. The NA fighters would pick out a target and Master Sgt. Markham would mark it with the SOFLAM. A short time later a laser-guided bomb would fall from the sky and destroy the target. On one occasion the NA fighters pointed to a tank, which they had been trying to take out for three years. The combat controller identified the target, vectored in a fast mover, painted the target, and destroyed the tank all within twenty minutes. The NA forces were amazed at the accuracy of the laser-aiming device, so much that they seemed to avoid the device as if it was some type of death ray.

The accuracy of the attacks was not lost on the Taliban who began to mount a counterattack against the Northern Alliance and their newfound allies: Markham and ODA-555. On one side you had a handful of special operators, on the other side ten thousand Taliban fighters. The Taliban had a vast array of guns, tanks, and AAA as they dug in readying for a long fight.

However, what they did not know is there was now a combat controller on the ground, and for the next ten days he had at his disposal every aircraft that was in theater and even a few outside as well. The fighting continued for two weeks as the SOF operators worked around the clock as the U.S. Air Force pounded Kabul. The skies were filled with U.S. and British planes, from gunships to bombers, which rained death down on the enemy. All the time Master Sergeant Markham performed his mission with as much skill as a conductor directs his orchestra.

The fighting intensified and the Taliban mounted a counterattack, throwing everything at the American SOF team and the NA forces. Markham was pinned down, out manned, and out gunned. Training kicked in and he did what combat controllers do—shoot, move, and communicate. A B-52 bomber was on station and Markham called in an air strike, danger close.

At a classified airfield in Afghanistan, a ground mobility vehicle is loaded onto a MC-130P Combat Shadow. This scene would be repeated over and over as AFSOC aircrews inserted U.S. Special Operations forces through their area of operations as they hunted down Taliban and al-Qaeda fighters. Capable of landing in the dark, most likely the landing zone would already be marked out by a waiting special tactics team. *U.S. Air Force*

As the bombs fell, the NA commander shielded the body of the American. He would later explain, if he had died, his next in command would take over. If the American would die, the bombers would be gone. Master Sergeant Markham was awarded the Silver Star for his action in Kabul. Within the citation the U.S. Air Force credited Markham with, ". . . (D)irecting 175 sorties between Oct. 14 and Nov. 20 that resulted in eliminating 450 enemy vehicles and killing more than 3,500 Taliban fighters."

Intelligence had told the team they have six months to get into Kabul. With the precision-guided air strikes called in by Master Sergeant Markham and the tenacity of the Special Forces team, the mission was accomplished in twenty-five days. The AFSOC combat controller along with the SF ODA entered the U.S. Embassy in Kabul and raised the American flag over the site.

## *Fall of Mazar-e-Sharif*

In November 2001, Operational Detachment Alpha (ODA) 595 from the U.S. Army's 5th Special Forces Group (Airborne) was working in northern Afghanistan with the warlord Abdul Rashid Dostum. Their mission was to combine with ODA 534 who was working with Mohammed Atta and take down the Taliban fortress at Mazar-e-Sharif.

Assigned to the ODA was Master Sgt. Bart Decker a combat controller with the 720 Special Operations Group. Using various aircraft, Master Sergeant Decker was able to call in precision-guided munitions on the enemy forces. Due to the altitude of the B-52 bombers and F-16 aircraft, it was not unusually to "paint" the target and then wait approximately two minutes for the bomb to find its target. This amazed the commander of the Northern Alliance forces. He was able to see through the SOFLAM sight, yet saw no bombs, he heard the chirping of the laser designator, yet heard no aircraft. Then as if by magic, the target in front of him exploded. One ODA Captain related they thought the Americans processed a "death ray," so precise was the targeting.

This would be the first major factory for the Northern Alliance and was a significant defeat for the Taliban. Two ODAs, a couple of combat controllers, along with a handful of British SAS, and their Northern Alliance allies captured the Taliban fortress at Mazar-e-Sharif. These actions marked the collapse of the Taliban forces in northern Afghanistan, as thousands of Taliban and al-Qaeda fighters fled east to Kunduz in an assortment of pickups and FWD vehicles.

Master Sgt. Bart Decker, a combat controller from Air Force Special Operations Command at Hurlburt Field, Florida, rides on horseback with the Northern Alliance in Afghanistan. Gen. John P. Jumper, U.S. Air Force Chief of Staff, related, "Combat inspires the need to invent things on the spot when you have to handle difficult circumstances you've never come across before." Special Operations forces troops riding horse back in Afghanistan use laser devices to help relay target locations through laptops to a satellite as an example of how people handle difficult circumstances. *U.S. Air Force*

## *Khandahar*

One of the largest helicopters assault since the Vietnam War would take place as U.S. Special Operations forces prepared to assault the compound of Taliban leader Mullah Mohammad Omar. A twelve-man special tactics team comprised of combat controllers, pararescuemen, and special operation weathermen were placed on the ground to perform a reconnaissance mission. Their RECCE (pronounced RECK-ee) mission was to provide detailed information on the helicopter landing zone, LHZ, and intelligence on enemy activity.

## *Tora Bora*

The man to catch was Osama bin Laden; he had orchestrated the September 11 attacks on America. Intelligence had placed him in the Tora Bora region in what was a massive complex of caves and tunnels. Hearing this info the special operations

dam broke; members of the Special Forces, Delta Force, and British SAS converged on the region to hunt down this elusive nomad referred to by his followers as "The Prince" or "The Director." Attached to these SOF units were members of AFSOC's special tactics squadron.

The combat controllers were responsible for bringing the fire power of U.S. and Coalition aircraft down to bear on the Taliban and al-Qaeda forces. During this operation in December 2001, combat controller Technical Sergeant "Mike" worked constantly calling in multiple CAS missions on the enemy. His use of radio, GPS, and laser targeting systems allowed him to place munitions with surgical accuracy and volume unprecedented prior to the attack on Tora Bora.

During the heat of the battle, Technical Sergeant Mike moved from the relative safety of his position forward to assist the local Afghan fighters in their assault against the enemy. All the while he was coming under heavy machinegun and mortar fire. He controlled more than three hundred CAS storied from multiple aircraft, ranging from AV-8B Harrier to B-52 bombers; as well as expended the full combat loads of five AC-130 gunships. Overall, when the dust had settled, he had personally directed more than 600,000 pounds of ordinance on enemy targets. Yet, in spite of all this destructive power, as the SOF units tightened their hold on the region, it was like tightening your grip on a handful of sand, and Osama bin Laden slipped through the gaps.

Seen here is one of the many bunkers used by the Taliban and al-Qaeda forces. From the air, the bunkers are almost invisible as they blend in with the terrain. This is a case where intelligence and photos from an orbiting UAV was not enough; you had to have boots on the ground and eyes on the target. During the battle of Tora Bora, one combat controller personally called in more than six hundred thousand pounds of ordnance with pinpoint accuracy on enemy positions. *U.S. Air Force*

### *Operation Anaconda-Takur Ghar*

In March 2002 U.S. and coalition forces commenced Operation Anaconda in the mountainous region near the Shah-e-Kot Valley. Operation Anaconda was part of the ongoing effort in Afghanistan to root out Taliban and al-Qaeda forces holed up in the Pakitia Province area of the country. The operation began March 3 with the insertion of U.S. and coalition forces into the region south of Kabul. What made Takur Ghar so important to Operation Anaconda was it had a commanding view of the entire valley from the mountaintop. Unfortunately, military positions are a lot like real estate, and if you think someplace is great to set up an OP, chances are the enemy has the same thoughts.

Such was the case in the early hours of 4 March 2002 when an MH-47E of the 2nd Battalion, 160 Special Operations Aviation Regiment, call sign "Razor O3," attempted to insert a team of U.S. Navy SEALs and an AFSOC combat controller, Technical Sgt. John Chapman, onto the mountaintop and came under heavy machinegun and RPG fire. Evading the ground fire, the pilot immediately pulled pitch, and despite an RPG hit to the hydraulics, managed to extract the helicopter out of harm's way, setting the damaged aircraft down seven kilometers away. Unbeknownst to him at the time was one of the SEALs, Petty Officer 1st Class Neil Roberts, fell from the helicopter, landing in the snow-covered mountain some ten feet below.

Knowing that PO1C Roberts was all alone on the HLZ, Technical Sergeant Chapman quickly established radio contact with an AC-130 gunship. The gunship provided protection for the downed aircraft and team. Once the area was secure, Chapman directed the gunship to initiate a search for the lone SEAL. Using the aircraft's sophisticated sensors, the aircrew begin looking for Roberts; additionally, a Predator UAV was also in position overhead.

At Chapman's request and direction, another 160 Chinook, "Razor 04," extracted the SOF team and crew from the downed helicopter. The special operations team was ready to return to the mountaintop in an attempt to rescue Roberts. The combat

controller jumped on the aircraft to assist in the rescue attempt. As the MH-47E inserted the team it came under heavy machinegun and RPG fire. Chapman was the first man down the ramp and immediately engaged two Taliban fighters. Under fire and with minimal cover, he continued forward, concentrating his fire on an enemy machinegun nest. He continued to attack the enemy until he was mortally wounded. Technical Sergeant Chapman would become the first combat controller killed in action since the Vietnam War. His quick and decisive action against the enemy forces gave the remaining team members the time they needed to get to defensive positions. The SEAL team leader of the rescue related that Chapman's actions had undeniably saved the entire rescue team.

However, the team was not out of the woods, surrounded by Taliban and al-Qaeda fighters, the rescuers had now become in need of rescuing themselves.

The quick reaction force was ordered to the mountaintop where they were to rescue the entrapped operators and destroy the enemy. The two helicopters carrying the QRF were "Razor 01" and "Razor 02." Aboard the lead Chinook were ten members of the 75th Ranger Regiment; an ETAC airman; U.S. Air Force combat controller Staff Sgt. Gabe Brown, 22nd special tactics squadron; along with Senior Airman Jason Cunningham, 38th Rescue Squadron, and Techical Sgt. Keary Miller, 123rd Special Tactics Squadron, both AFSOC pararescuemen. As the MH-47 helicopter came in from the south, "Razor 01" was hit on the starboard side by a RPG and

Takur Ghar, or Roberts Ridge as it would be called, was a very costly piece of real estate in the Afghan mountains. A total of eight U.S. SOF operators would be killed in action before the fight was over. Seen here is what is left of an MH-47E helicopter of the 160th Special Operations Aviation Regiment. The helicopter, "Razor 01," had been so severely damaged during the assault on the mountain it was unable to be removed from the site. The wreckage was left on the mountain and a U.S. air strike was called in to destroy the aircraft. *U.S. Air Force*

it came under intense ground fire from three other directions by machineguns and small arms fire. Try as they might to abort the landing, the Chinook was too severely damaged to fly and dropped to the mountain some ten feet below.

As the battle raged around the disabled aircraft, combat controller, Staff Sgt. Brown called in and directed CAS for the next fifteen hours. With enemy fighters as close as 20 meters away, the combat controller was often calling the air strikes "danger close." His actions would turn the tide in favor of the SOF units on the snow-covered top of Takur Ghar. As the day of fighting came to a close, seven courageous SOF troops had made the ultimate sacrifice; among them two AFSOC special tactics airmen, Technical Sgt. John Chapman and Senior Airman Jason Cunningham. Not since Task Force

The special tactics teams work closely with the U.S. Army Special Forces. Here, a combat controller prepares to search a cave along with an SF ODA member in the mountainous terrain of Afghanistan. These battlefield airmen provide an extra layer of lethality operating with any of the SOF units. Both operators are armed with M4A1 carbines equipped with various SOPMOD accessories. *U.S. Air Force*

Positioned among the scrub brush in the Afghanistan mountains, a combat controller prepares for his next fire mission. Using the laser designator, he will be able to place a laser-guide smart bomb accurately on target. The placement of a combat controller on the ground and a fast mover or gunship overhead results in one of the most lethal weapon combinations in the U.S. arsenal. *U.S. Air Force*

Ranger in Mogadishu, Somalia, in October 1993 had the SOF community experienced such an intense firefight as in the battle for Roberts Ridge, named after the fist man to fall, PO1C Neil Roberts.

Since the first battlefield airman was inserted into Afghanistan in support of OEF until today, numerous missions have been carried out by these twenty-first-century Air Commandos. Missions such as that of Technical Sgt. Bradley Reilly, a combat controller with the 23rd Special Tactics Squadron, Hurlburt Field, Florida, continue to be conducted every day in support of OEF/OIF. Technical Sergeant Reilly was serving on the Quick Reaction Force as the joint terminal attack controller assigned to Special Forces ODA 163, call sign "The Beast." After answering a call from an allied general, the QRF aboard two Black Hawks were returning to the FOB. En route they observed anti-collation militia, ACM, and set down to investigate.

At first there was sporadic gunfire, which then erupted into several ACM fighters engaging Technical Sergeant Bradley and the SF soldier with him. The gunfire had wounded both of the men, yet in spite of his wounds, Technical Sergeant Bradley continued to engage the enemy with his M4A1 carbine. He tended to the wounded "green beret" and called in AH-64 Apache gunships and A-10 Warthogs, which had been on station. As the result of his actions, the enemy was eliminated, the SF soldier survived, and Technical Sergeant Bradley would be awarded the Silver Star and Purple Heart medals for his decisive actions on that Afghanistan mountainside.

During a visit to the Combat Control School at Pope AFB, Defense Secretary Donald H. Rumsfeld commented that "Some 85 percent of the air strikes in Operation Enduring Freedom were called in by U.S. Air Force combat controllers."

## *Operation Iraqi Freedom*

Maj. Gen. Stanley McChrystal, U.S. Army vice chief of operations on the Joint Staff stated, "Operation Iraqi Freedom is supported by the largest special operations force since the Vietnam War." Many of the missions conducted by AFSOC during OIF remain classified; however, a few have begun to come to light. AFSOC three MC-130 from the 919 SOW refueled half a dozen MH-53 Pave Lows serving as infiltration platform for SOF units as well as "other government agency" personnel.

Even though they lost one Pave Low, the Air Commandos drove on and carried out their mission eight hours before the forty-eight-hour deadline President George W. Bush gave Saddam Hussein. Mere hours before the collation aircraft released the Shock and Awe of OIF, the 919 SOW using MC-130E Combat Talons inserted a hundred SOF personnel, including vehicles and more than 119,000 pounds of gear, into Wadi al Kir airfield in Iraq. AFSOC personnel would be infiltrated along with their equipment to establish airfields for follow forces.

Members of the 123rd special tactics squadron, an Air National Guard component of AFSOC, was instrumental in successful operations in northern Iraq. As part of Task

A SEAL desert patrol vehicle is loaded onto an MH-53 in preparation for their next mission. Whether it be direct action, special reconnaissance, or other tasks, the Pave Low crew will get them on target and on time. *U.S. Air Force*

Force Viking, the ST teams were inserted into Iraq covertly via MC-130. Once on the ground they worked with SF ODAs in training Kurdish fighters in the forward non-permissive region. Their mission was to establish and train two militias: the Kurdish Democratic Part (KDP), consisting of approximately forty thousand fighters, and the Party for a Unified Kurdistan (PUK), numbering around twenty thousand troops.

Combat controllers in another region operating with SF ODAs engaged Republican Guard north of Karbala. The urban environment had turned to a sea of green as Iraqi soldiers appeared in every window, doorway, and rooftop. As bullets rained down on the U.S. SOF teams, the combat controller radioed in close air support. A pair of A-10 Warthogs orbiting in the area answered the call for CAS. The area was heavily populated and there was a concern regarding collateral damager, so they could not release their bombs. Instead the pilots came in with their 30mm cannons blazing and routed the Iraqi soldiers.

**Above:** Members of the special tactics teams integrate seamlessly with other SOF units. The STT complements the unit by bringing a vast array of war-fighting skills (i.e., austere airfield control, terminal attack control, personnel rescue and recovery, assault zone assessment, battlefield trauma care, and combat weather forecasting). Note the desert "tiger stripe" BDUs as well as the assortment of SOPMOD accessories. *U.S. Air Force*

Operating in northern Iraq, the members of the special tactics teams provide support to the Kurds as well as U.S. Special Operations forces. This Kurdish fighter is armed with an M240, while the U.S. operator carries an AK47 variant. The STT provides close air support, command, and control as well as interfacing with UAVs to determine enemy location, composition, and strength. *U.S. Air Force*

### *Western Iraq*

Special Operations forces were also responsible for attacking a number of specific targets such as airfields, weapons of mass destruction sites, and command and control headquarters. In the West, one of the crucial tasks for the SOF units was a large area denial mission. On 14 March 2003, five days before the official start of Operation Iraqi Freedom, the morning quiet was turned into deafening explosions. The source of the attack came from a pair of B-1Bs from an undisclosed location somewhere in southwest Asia from an attack and airfield complex 250 miles west of Baghdad. The complex, known merely as H3 Al Walid airbase, would serve as a staging point for Delta, SAS, 45 Commando, and Australian SASR. Supported by AFSOC forces, this who's who list of SOF units carry out a variety of missions, including "Scud Hunting."

Additionally, H1 and H2 airbases were seized by the 75th Ranger Regiment on the night of 25 March 2003. Supporting the seizures of these strategic objectives were the MH-53 Pave Lows, AC-130 gunships, and special tactics teams. The significance of these bases was their close proximity to the Jordanian border. From here U.S. and allied special operations team maneuvered eastward toward Baghdad. While they traverse across the desert, AFSOC UAVs are overhead providing reconnaissance for their route of travel.

A special tactics team prepares their equipment prior to a mission in support of Operation Iraqi Freedom. Depending on the mission, the team will carry an assortment of gear that may include: UHF/VHF radio, intra-team radio, headsets, GPS units, SOFLAM, laser ranger finder, laser pointers, scopes, thermal video, beacons, tactical UAV, Panasonic "Toughbook" computer, extra batteries, food, water, ammunition along with primary and secondary weapons. When you add it up, the total weight of the equipment will often exceed that of the operator. *U.S. Air Force*

### *Battle of Debecka Pass*

On 26 March 2003, Special Forces ODA 391 and 392 off loaded their ground mobility vehicles from an MC-130 Combat Talon in northern Iraq. They would link up with ODA 044 and their Kurdish Peshmerga fighters (translated to "Not afraid to die"); attached to the ODAs were combat controllers. There mission codename Northern Safari was to secure critical intersection located in the vicinity of Debecka between Irbil and Kirkuk. Their orders were to hold until relieved by elements of the 173rd Airborne.

Just after midnight on 6 April 2003, B-52s bombed the ridgeline between the SOF teams and the objective.

As the U.S. and their allies closed in on the city, they were engaged by Iraqi forces. While the SF soldiers engaged the enemy with .50-caliber machineguns and Javelin shoulder launched missiles, combat controllers called in close air support. During the firefight, the SF and CCTs had successfully engaged an Iraqi infantry brigade reinforced with T-55 tanks and MTLB armored personnel carries, without a single American casualty.

### *Mukarayin Dam*

As U.S. and coalition forces pressed their attack on Baghdad in April 2003, military planners became concerned about the Mukarayin Dam located 57 miles northeast of the Iraqi capital. Though there was no military activity at or near the hydro-electric dam, it did offer the enemy a tempting target. Should the Iraqis decide to blow up the dam, it would send waves of water surging down on Baghdad, flooding the city. It was decided that a combined team of U.S. Navy SEALs along with Polish Grom commandos would secure the dam.

Providing the insertion platform for the commandos would be the 20th Special Operations Squadron. For several days the SEAL/Grom teams practiced their assault tactics, techniques, and procedures. When the time came, they loaded onto several Pave Low helicopters and began their insertion

A special tactics team conducts a check of a hanger at Baghdad International Airport in Iraq. The STT are often the first SOF operators on the ground to ensure the airfield is capable of sustaining follow-on aircraft. The members of AFSOC bring an essential skill set to the SOF in the Global War on Terrorism. *U.S. Air Force*

from their base in Kuwait. Crammed inside the helicopters, the teams traveled for five hours under a moonless night, including the aerial refueling of each of the aircraft by a KC-130 tanker.

When they reached their target, the pilots of the MH-53 helicopters had to avoid several high-voltage power lines as they hovered over the dam. The crew members deployed the thick nylon ropes and the commandos quickly fast roped to the ground. Once down, they raced to their prearranged sites on the dam, adjacent power station, and several surrounding buildings. The securing of the site proved to be one of the final missions carried out during the major combat phases of Operation Iraqi Freedom.

### *Predators*

Members of AFSOC are responsible for running the unmanned aerial vehicles, UAVs in Operation Iraqi Freedom. They can be found working with the Kurds and Special Forces in the north, running surveillance missions in Baghdad, and just about anywhere in between.

On one mission the Predator teams were providing over watch along the Euphrates River. On several occasions U.S. and coalition forces had come under machinegun fire. Utilizing the UAV, the AFSOC pilots switched over to thermal imaging and discovered Iraqi insurgents hiding on barges on the river. The UAVs were also instrumental in SOF infiltration and exfiltration. In one case it was discovered that an SOF infiltration landing zone (LZ) had been compromised and with the new information the team executed a real-time divert to a new LZ (surveyed by the same Predator) and ensuring the safe accomplishment of the mission.

The UAVs allowed the U.S. Air Force to be the hammer to the ground forces anvil. As the ground component marched toward Baghdad, the Predators provided crucial

A team of pararescuemen practice first-aid techniques during a training exercise at Baghdad International Airport during Operation Iraqi Freedom. While PJs are among the foremost medical specialists in the military, they remain "shooters" and are as skilled with weapons as they are with IVs and stethoscopes. *U.S. Air Force*

real-time targeting data to air and ground commanders, allowing Coalition Air Forces to destroy substantial enemy units in the path of U.S. ground forces, ensuring a swift march to the capital.

Lt. Gen. Walter E. Buchanan III, the Commander of U.S. Central Command Air forces, related to the House Armed Services Committee in the U.S. Congress, "Our UAVs leveraged the ability of other air force assets to attack key Iraqi command and control facilities and leadership targets. We were simultaneously destroying fielded forces, command and control centers, supporting our Special Operations forces, and ensuring that we gained and maintained air superiority and supremacy. We were successful in meeting and surpassing our goals, and twenty-one days later Baghdad fell into Coalition hands."

The commander of Air Force Special Operations Command, Lieutenant General Michael W. Wooley, related combat controllers who used small Bat-Cam unmanned aerial vehicles that weighed as little as two pounds and could be carried in the airman rucksack. These small UAVs extended the situational awareness of the battlefield airman up to three miles. This intelligence allowed the combat controllers to call in air strikes on insurgent concentrations along the SOF team's route of travel far enough in advance to remove the threat before a ground firefight occured. From 20 March 2003 when coalition forces invaded Iraq and concluding 1 May 2003, not a single SOF unit operating in OIF with an AFSOC combat controller equipped with a small UAV was ambushed by enemy forces.

The AFSOC air crews above and the special tactics squadrons on the ground continue to carry out a variety of missions as America continues to prosecute the Global War on Terrorism. It may be providing CAS or the covert insertion of an SOF unit. Whether it is a lone battlefield airman attached to an ODA, an STT inserted to establish an air head for follow-on forces, or the aircrews, the men and women of the U.S. Air Force Special Operations Command continue to bring a lethality of force to any mission. As in the past, today they remain an integral part of a huge percentage of U.S. military combat missions around the globe.

Chapter 5

# SPECIAL OPERATIONS AIRCRAFT

The backbone of the Special Operations Wings is the venerable Lockheed C-130s. With more than forty years under its wings, the Hercules has more than lived up to its name. Its origins date back to the mid-fifties when the U.S. Air Force was looking for a turboprop transport to be used by the Military Airlift Transport Service (MATS), later known as Military Airlift Command (MAC) and the Tactical Air Command (TAC). The first production C-130, often called the "Herky-Bird," made its first flight on 7 April 1955. The initial deployment went to the Tactical Air Command in December 1956. The Hercules set an entirely new standard in tactical airlift. Through the years the C-130 has been in service in more than twenty countries and has evolved into many variants, four of which are important to special operations.

Tracing its heritage back to Vietnam, "Puff the Magic Dragon," "Spooky," "Stinger," and "Spectre" were names that brought fear into the hearts of the enemy forces and, more

The primary missions of the AC-130U gunship are close air support, air interdiction, and force protection. Close air support missions are in support of troops in contact with enemy forces, convoy escort, and operations. Air interdiction missions are conducted against preplanned targets or targets of opportunity. Force protection missions include air base defense and facilities defense. The call sign for the U-model gunship is "Spooky"; while the H model is called "Spectre."

**Left:** The current flagship of AFSOC is the AC-130U model "Spooky." So intricate is the weapons system, the AC-130U has a more complex wiring system than the NASA space shuttle. This particular aircraft is in operations with the 4th Special Operations Squadron at Hurlburt Field, Florida. From Roberts Ridge to Tora Bora and hundreds of other sorties, the AC-130 gunship brings a devastating lethality to the battlefield.

often than can be covered here, the relief and accolades of U.S. troops, both Special Forces and conventional. From its origin of the AC-47 with multiple miniguns through today, the gunship has evolved into a sophisticated, highly technical aircraft capable of turning the night sky into death. During Operation Restore Democracy in Haiti, Lt. Col. Tim Schaffer of the 4th Special Operations Squadron reported that AFSOC put the AC-130 gunships on station even though there was no hostile activity. "It gave the troops on the ground peace of mind to hear the drone of those engines overhead, just in case."

## *AC-130U "Spooky" Gunship*

The newest of the AC-130 gunships and the current "flagship" of the Air Commando skies is the AC-130U. At a value of $190 million, this new Spooky was built with special operations in mind. Its primary mission is to deliver precision firepower in support of close air support for special operations and conventional ground forces. Close air support (CAS) is defined as air action against hostile targets that are in close proximity to friendly forces and require detailed integration of each air mission with the fire and movement of those forces. The Spooky can provide accurate fire support with limited collateral damage and can remain on station for extended periods of time. These activities are primarily performed in the cloak of darkness.

The business end of the gunship is found in three weapon systems. As you enter the AC-130U by way of the front crew hatch and turn to your right, you'll find the first

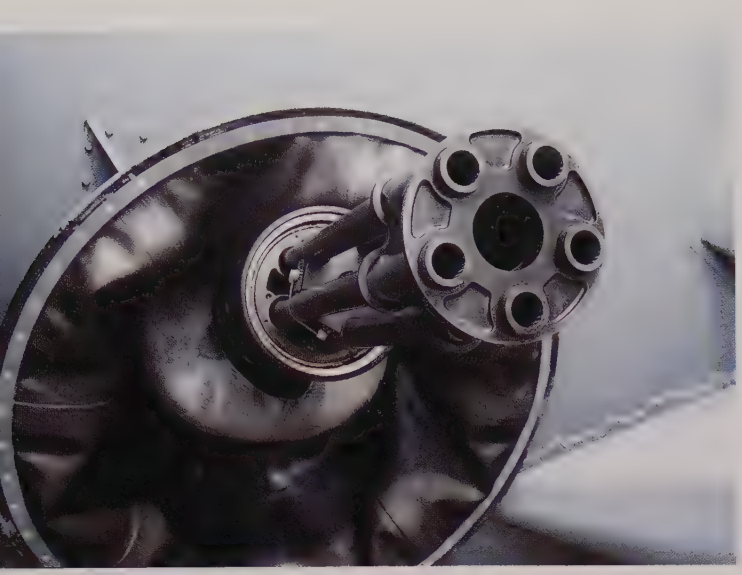
The AC-130U operates with a crew of thirteen. The gunship is armed with a 25mm Gatling gun, 40mm cannon, and a 105mm cannon. The "Spooky" gunship has a longer loiter time than the fast movers and can deliver highly accurate placement of low-yield munitions, desirable in CAS missions. Additionally, the AC-130U is equipped with a high-resolution sensor and enhanced communications suite compared to the tactical jet aircraft. While still in evaluation, future versions of the gunship may see a stealthier aircraft with the incorporation of missiles and laser systems. *U.S. Air Force*

weapon system, the GAU-12/U 25mm Gatling gun, which is fully traversable and is also capable of firing 1,800 rounds per minute from altitudes of up to twelve thousand feet. The 25mm weapon system automatically ejects the spent brass into a holding area where it is emptied out at a later time. There is no longer a need for the crew to shovel out the shell casings after a mission. This feature provides a safer environment for the crew as they will not trip over loose 25mm shells on the fuselage floor. Munitions available for the GAU-12 include the PGU-25 and PGU-38 high-explosive incendiary (HEI) and PGU-23 target practice (TP) round. The PGU-25 and PGU-38 HEI are effective against exposed personnel and light materials with both fragmentation and incendiary effects. The PGU-23 TP is primarily used for target practice, although it does provide some penetration capability. The TP round is most effective when mixed with HEI to provide an impact signature.

Two holdovers from the A and H model gunships are the 40mm Bofors guns and the 105mm Howitzer cannon—both battle-tested weapons. The 40mm Bofors gun has been associated with the gunships since 1969. Once used on naval vessels as anti-aircraft guns, the weapons were stripped down from pedestal mounts and placed in the AC-130s. The 40mm Bofors is mounted in the port side of the AC-130U with the ammunition stored in a special rack on the starboard wall of the fuselage, behind the gun.

Ammunition for the 40mm Bofors includes a variety of projectiles. The primary ordnance is the PGU-9B/B and PGU-9C/B high explosive incendiary (HEI) Zirconium liner cartridges. Other cartridges include the PGU-9B HEI-P Misch metal liner, the MK-2 series HE-P and HEI-P cartridges (primarily used for training), and the M81 series armor piercing (AP) projectile, some of which contain twelve-second-burn-time tracer elements (approximately ten thousand feet). The PGU-9B/B and PGU-9C/B HEI rounds are very effective against personnel, light vehicles, and as an incendiary for open flammables. The PRU-9B is a little less effective against the same target, as it contains less HE filler, resulting in a less effective fragmentation. The 40mm is preferred for CAS in "danger close" support to friendly forces due to its small fragmentation pattern.

The port side of an AC-130U gunship in operation with the 4th Special Operations Squadron. From this angle, the weapon systems are clearly visible. Located just aft of the crew door is the 25mm minigun. Moving toward the rear past the landing gear is the 40mm BFORS and then the 105mm Howitzer cannon. Continuing up the fuselage toward the tail is the direct infrared counter measure (DIRCM).



An up-close-and-personal view of the GAU-12/U 25mm General Electric Gatling gun. An upgrade from the 20mm gun, this new 25mm is traversable. The crew no longer has to shovel spent brass after a fire mission. The unit will automatically dispose of the cartridges for later removal. No more tripping on shell casings.

The other veteran on board, just aft of the Bofors, is the M102, 105mm Howitzer cannon. This weapon was derived from the U.S. Army field artillery M1A1 Howitzer. It has been modified to fire from an aircraft and is placed in a special mounting and positioned in the port side of the gunship. The M102 fires both the M1, 32.5-pound high explosive (HE), and the M60, 34.2-pound white phosphorous (WP) projectile at a range of 11,500 meters. The fuses for the HE rounds are super-quick M557, selectable to point detonation or a 0.05-second time delay; the hard-end FMU-153B with point detonation or 0.004- to 0.009-second delay; and the M732 proximity fuse, which detonates approximately seven meters above the ground or point detonation if not set for delay. The M1 HE projectiles with fast-fuse point detonation are effective against personnel and light vehicles. While the HE round with fuse delay is effective against light structures and personnel under heavy cover or foliage, the HE FMU-153B would be used for hardened target penetration capability. The M60 WP round, used only with the M557 fuse, is an effective smoke round with limited incendiary effect.

Unlike higher-speed fixed-wing aircraft (a.k.a., "fast movers"), which must have qualified forward air controllers (FACs) for ord-

As lethal as the AC-130U can be, the loitering flight during its firing pattern makes it vulnerable to surface-to-air missile attacks. To defend the aircraft and crew, "Spooky" has been fitted with the direct infrared counter measure (DIRCM) anti-missile system, which can be seen attached to both sides of the fuselage. Also of note are the electronic counter measures (ECM) in the modified beavertail of the aircraft.

A closer look at the horizon indicator on the instrument cluster indicates the gunship is in a port-side pylon turn. The AC-130U will perform a banking maneuver so its weapons may be unleashed upon the designated targets.

nance delivery in close position to friendly forces, the AC-130U can be controlled by fire support officers, team leaders, or self-FAC. This unique capability makes the gunship user-friendly for the operators on the ground, but requires a high degree of flexibility on the part of its crew.

These fire-control officers are located onboard the gunship in the battle management center (BMC). Here they operate the state-of-the-art sensors, navigation, and fire-control systems in a work area protected by a composite armor of silicon carbide and Spectra fiber. The BMC, coupled with the trained eyes and skilled hands of its officers, enables the crew to deliver the Spooky's firepower or area saturation with surgical precision. This is accomplished even in adverse weather conditions and total darkness.

The assortment of sensors fitted in this modern gunship consist of an all-light level television (ALLTV) system, a laser illuminator assembly (LIA), and an infrared detection set. A multimode radar furnishes exceptionally long-range target direction and identification. This radar is also able to track 40mm and 105mm projectiles and return pinpoint impact locations to the crew for subsequent target adjustment.

The fire-control systems offer a dual-target attack capability. Engaging two different sensors and using both weapons, the 40mm Bofors cannon and 105mm Howitzer have been updated with improved electronics that allow simultaneous aiming at two separate targets by the gunnery crew. As long as the two targets are within a mile of each other, the gunship can divide its fire with devastating accuracy. No other air-to-ground attack platform in the world offers this capability.

The new AC-130U is fully pressurized, allowing greater speeds, increased range, and additional crew comfort due to its ability to fly above, rather than through, adverse weather. Navigational features include inertial navigation systems (INS) and the GPS. The U-model gunship is capable of operation in adverse weather, in poor visibility, using the APQ180 strike radar. The radar will track fixed or moving targets or beacon offsets.

Defensive systems include a countermeasures dispensing system that releases chaff and flares to counter radar and infrared-guided anti-aircraft missiles. To shield the aircraft's heat signature from the engines, the AC-130 U has infrared heat shields mounted underneath the engines to dispense and hide the engine's heat source from hostile anti-aircraft with counter-IR devices with the introduction of the directional infrared countermeasures system, or DIRCM. DIRCM fires a

laser at incoming heat-seeking missiles, blinding their optics and ruining their ability to track the aircraft, causing it to miss.

While close air support is the Spooky's primary mission, additional tasks it may undertake include air interdiction, armed reconnaissance, airbase, perimeter, and point defense; land, water, and heliborne troop escort; drop, landing, and extraction zone support; forward air control; limited airborne command and control; and combat search and rescue support.

At the conclusion of extensive testing by the U.S. Air Force Flight Test Center, the U-model Spooky was delivered to AFSOC on 1 July 1994. Thirteen of these aircraft are now assigned to the 16th Special Operations Wing's 4th Special Operations Squadron.

The AC-130 gunships were among the first AFSOC aircraft deployed to support Operations Enduring Freedom and Iraqi Freedom. Having the ability to loiter over the area of operations, the gunships were used as a force multiplier by providing precision close air support.

As the AC-130U Spooky flies into the twenty-first century, there are developmental plans being evaluated to make the gunship even more lethal. The current 25mm Gatling gun and the 40mm Bofors gun will be replaced with two 30mm Mark 44 Bushmaster II canons. In addition to the weapons upgrades AFSOC is testing the Viper Strike laser guided precision munitions. Manufactured by Northrop Grumman Corporation, the Viper Strike uses a combination of laser guidance and GPS to hone in on its target. The system would allow the AC-130 gunships to engage the enemy from higher altitude and a great standoff distance. Currently in evaluation, if approved, it could be in AFSOC gunships by 2010.

## *AC-130U Specifications*

**Contractor:** Boeing; **powerplant:** four Allison T56-A15 turboprop engines; **thrust:** 4,910 equivalent shaft power; **wingspan:** 132 feet, 7 inches (40.4 meters); **length:** 97 feet, 9 inches (29.8 meters); **height:** 38 feet, 6 inches (11.7 meters); **speed:** 300 miles per hour (at sea level); **range:** approximately 2,200 nautical miles, unlimited with air refueling; **ceiling:** 30,000 feet; **maximum takeoff weight:** 155,000 pounds (69,750 kilograms, peacetime), 175,000 pounds (wartime); **armament:** one GAU-12/U 25mm General Electric Gatling gun (firing rate of 3,600 rounds per minute; with a maximum of 4,200 RPM), one L-60 40mm Bofors cannon (firing rate of 100 shots per minute), one M-102 105mm cannon (firing rate of 6 to 10 rounds per minute); **avionics:** Hughes APG-80 fire-control radar, Texas Instruments AN/AAQ-117 forward looking infrared (FLIR) for 180 degree IR scanning, Gec-Marconi all-active, low-light level television (AALLLTV), INS/GPS navigation, ALQ-172 RF electronic countermeasures system, and ALR-69 radar warning receiver; **crew:** 13 total—five officers (pilot, copilot, navigator, fire-control officer, and electronic warfare [EW] officer) and eight enlisted (flight engineer, AALLTV operator, IR detection operator, four gunners, and loadmaster).

## *AC-130H "Spectre" Gunship*

The predecessor to the U-model, the H-model Spectre gunship, armed with 20-, 40-, and 105mm cannons, can deliver precision firepower in support of close air support missions. This includes alternate missions: air interdiction; armed reconnaissance; airbase, perimeter, and point defense; land, water, and heliborne troop escort; drop, landing, and extraction zone support; forward air control; limited airborne command and control; and CSAR support.

Heavily armed, the AC-130H incorporates side-firing weapons integrated with sophisticated sensor, navigation, and fire-control systems to provide surgical firepower or area saturation during extended periods, primarily at night as well as in inclement weather.

Included in the sensor array are lowlight television (LLTV) and infrared (IR) sensors. The H-model is also equipped with radar and electronic devices that give the gunship a positive IFF (identify friend/foe) to distinguish between supporting friendly ground forces and efficient delivery of ordnance on hostiles during all weather conditions. Navigation devices include an inertial navigation system and GPS.

During Operation Desert Storm, the Spectres provided air base defense and close air support for ground forces. While AFSOC aircraft and squadrons would play a primary role, it would not be without a high cost. AFSOC suffered its only loss of the war, an AC-130H of the 16th Special Operations Squadron—"Spirit 03" and a crew of 14. This was the single

largest "air" loss during the Persian Gulf War. Again, the men of AFSOC would live up to the heritage of the Air Commandos and make the ultimate sacrifice for their country and freedom.

Subsequently, the AC-130s were also used in Operation Continue Hope and United Shield in Somalia. In addition, Spectre gunships played a pivotal role in support of IFOR missions in Bosnia-Herzegovina. As NATO launched a three-day assault on Bosnian Serb targets, AC-130H gunships were tasked with targeting and destroying artillery and radar sites positioned around Sarajevo.

## *AC-130H Specifications*

**Contractor:** Lockheed; **powerplant:** four Allison turboprop engines T56-A15; **thrust:** 4,910 equivalent shaft power; **wingspan:** 132 feet, 7 inches (40.4 meters); **length:** 97 feet, 9 inches (29.8 meters); **height:** 38 feet, 6 inches (11.7 meters); **speed:** 300 miles per hour (at sea level); **range:** approximately 2,200 nautical miles, unlimited with air refueling; **ceiling:** 30,000 feet; **maximum takeoff weight:** 155,000 pounds (69,750 kilograms, peacetime), 175,000 pounds (wartime); **armament:** two 20mm Vulcan cannons with 3,000 rounds, one 40mm Bofors cannon with 256 rounds, and one 105mm Howitzer with 100 rounds; **crew:** 14 total—five officers (pilot, copilot, navigator, fire-control officer, and electronic warfare [EW] officer) and nine enlisted (flight engineer, LLTV operator, IR detection operator, five gunners, and loadmaster).

## *MC-130E/H Combat Talon*

The MC-130E Combat Talon I and the MC-130H Combat Talon II are designed for long-range clandestine or covert delivery of Special Operations forces and equipment and to provide global, day, night, and adverse weather capability to air-drop and air-land personnel and equipment in support of U.S. and allied Special Operations forces.

Combat Talons are equipped with FLIR, terrain following/avoidance radars, and specialized aerial delivery equipment. Incorporated into the Talons are a fully integrated inertial navigation (IIN), GPS, and a high-speed aerial delivery system. These special systems are used to locate small drop zones and deliver personnel or equipment with greater accuracy and at higher speeds than possible with a "vanilla" C-130. Such an example is U.S. Army Special Forces (Green Berets) or U.S. Navy SEALs operating in a sensitive or hostile territory.

A MC-130H Combat Talon II of the 15th SOS on the tarmac at Hurlburt Field. In order to keep the avionics cool while running on the ground, an air-conditioning unit is attached to the aircraft.

An MC-130H Combat Talon lands at an undisclosed airstrip in Afghanistan. The mission of the MC-130E Combat Talon I and MC-130H Combat Talon II is to provide global, day, night, and adverse weather capability to air-drop as well as air-land personnel and equipment. Capable of flying as low as two hundred fifty feet, these aircraft are equipped with in-flight refueling equipment; terrain-following, terrain-avoidance radar; an inertial and global positioning satellite navigation system; and a high-speed aerial delivery system. The aircraft is able to penetrate hostile airspace at low altitudes and crews are specially trained in night and adverse weather operations. *U.S. Air Force*

An MC-130H Combat Talon II comes in for a landing at Hurlburt Field. Encased in the large nose is the AN/APQ-170 multi-mode radar (MMR). Directly beneath can be seen the forward looking infrared (FLIR) allowing the Talon to penetrate hostile airspace. This Talon has been modified giving the aircraft the capability to conduct aerial refueling operations. The outermost pylons on the wings are MK32B-902E air refueling systems. The system consists of digital hose reel with a variable speed drogue enabling aerial refueling operations from one hundred to two hundred knots. The MC-130E/H models have been modified to accept this refueling system to provide a deep penetrating helicopter refueling role during special operations missions.

MC-130E/H Combat Talons are able to penetrate hostile airspace at low altitudes to carry out these missions. Talon crews are specially trained in night and adverse weather operations. It is well known that instrument flight rules, or IFR, govern ordinary aircraft flying through clouds. The Talons use their own version of IFR called *infrared* flight rules, which basically ignores all the rules and allows them to fly at high speeds at low levels in heavy ground fog or low cloud cover.

The MC-130H Combat Talon II features highly automated controls and displays that will reduce the crew size and workload. The flight deck as well as the cargo areas are compatible with night-vision goggles. The integrated control and display subsystem combines basic aircraft flight, tactical, and mission sensor data into a comprehensive set of display formats that assist each operator as he performs the tasks.

The pilot and co-pilot display formats include basic flight instrumentation and situational data. The display formats are available with symbology alone or with symbology overlaid with sensor video. The navigator uses radar ground map displays, FLIR display, tabular missions management display, and equipment status information. The EW officer's displays are used for viewing the EW data and to supplement the navigators in certain critical mission phases.

During Operation Desert Storm, the MC-130E Combat Talon I played a vital role. One-third of all air drops in the first three weeks of the war were carried out by MC-130s. The primary role was that of psychological operation, as it air-dropped 11 BLU-82/B general-purpose bombs—a rather pedestrian name for a 15,000-pound bomb. Make no mistake, a 7 1/2-ton bomb makes quite an impression. When they exploded, a British SAS team radioed back to headquarters that "the Yanks are using nukes." Along with the bomb runs, the Talons also flew multiple mission air-dropping leaflets. A secondary role was in the CSAR missions.

## *MC-130E/H Specifications*

**Contractor:** Lockheed; **powerplant:** four Allison turboprop engines T56-A15; **thrust:** 4,910 equivalent shaft power; **wingspan:** 132 feet, 7 inches (40.4 meters); **length:** MC-130E, 100 feet, 10 inches (30.7 meters); MC-130H, 99 feet, 9 inches (30.4 meters); **height:** 38 feet, 6 inches (11.7 meters); **speed:** 300 miles per hour (at sea level); **range:** approximately 3,110 nautical miles, unlimited with air refueling; **ceiling:** 30,000 feet; **maximum takeoff weight:** 155,000 pounds (69,750 kilograms); **load:** MC-130E, 53 troops or 26 paratroops; MC-130H, 75 troops or 52 paratroops; **crew:** MC-130E, nine total—five officers (two pilots, two navigators, and one EW officer) and four enlisted (one flight engineer, two loadmasters, and one communications specialist); MC-130H, seven total—four officers (two pilots, one navigator, and one EW officer) and three enlisted (one flight engineer and two loadmasters).

## *MC-130W*

The MC-130W is the newest addition to the AFSOC inventory. Its primary mission is the infiltration, exfiltration, and resupply of U.S. and allied Special Operations forces in direct support of unified and theater special operations commands and USSOCOM contingencies. Secondary missions include refueling of special operations rotary aircraft, forward arming and refueling (FARP), specialized ordnance delivery, airdrops in support of psychological operations, and limited command and control capabilities. Its global mission is primarily executed under the cover of darkness to reduce operational risk.

The aircraft is a modified C-130H(2) incorporating improved navigation, threat detection and countermeasures, and communication suites. The navigation suite is a fully integrated global positioning system (GPS)/inertial navigation system (INS) that interfaces with the AN/APN-241 low-power color radar and AN/AAQ-17 infrared detection system (IDS). The improved threat detection and countermeasures systems include advanced radar and missile warning receivers, chaff and flare dispensers and active infrared countermeasures, protecting the aircraft from both radar and infrared-guided threats. The communication systems upgrades include dual SATCOM suite with data burst capability. The aircraft has both interior and exterior night-vision goggle compatible lighting.

Structural improvements to the basic hercules aircraft include the addition of the universal aerial refueling receptacle slipway installation (UARRSI) and a strengthened tail

empennage. The UARRSI allows the aircraft to conduct in-flight refueling as a receiver, and strengthening of the tail allows high speed low level aerial delivery system (HSLLADS) airdrop operations. The MC-130W is equipped with Mk32B-902E refueling pods. These pods are part of the most technologically advanced refueling system available and provide the ability to refuel special operations helicopters and the CV-22.

## *MC-130W Specifications*

**Primary mission:** Infiltration, exfiltration, and resupply of Special Operations forces; also provides in-flight refueling of special operations vertical lift assets; **contractor:** Lockheed; **powerplant:** four Allison T56-A-15 turboprop engines; **thrust:** 4,910 shaft horsepower each engine; **Length:** 98 feet, 9 inches (30.09 meters); **height:** 38 feet, 6 inches (11.7 meters); **wingspan:** 132 feet, 7 inches (40.4 meters); **speed:** 300 miles per hour; **ceiling:** 33,000 feet (10,000 meters); **maximum takeoff weight:** 155,000 pounds (69,750 kilograms); **maximum normal payload:** 33,000 pounds; **maximum range with maximum normal payload:** 1,208 miles (1,050 NM), in-flight refueling extends this to unlimited range; **crew:** seven total—four officers, pilot, copilot, and two navigators and three enlisted (flight engineer, and two loadmasters).

## *MC-130P Combat Shadow*

The Combat Shadow extends the range of special operations helicopters by providing air refueling. Operations are conducted primarily in formation, at night, at low level to reduce the probability of visual acquisition and interception by airborne threats. This is carried out in clandestine, low-level missions into politically sensitive or hostile territory. The Shadow is a visual flight rule (VFR) aircraft and would only be used when the pilots can see the ground, although penetrations are often aided by radar. The MC-130P may fly in a multi-ship or single-ship mission to reduce detection.

The secondary mission of the Combat Shadow includes the delivery of Special Operations forces. Small teams, assorted gear, equipment, Zodiacs, and combat rubber raiding craft (CRRC) are a few of the specialized items that are conveyed by the aircraft and its crew.

The Combat Shadow has a full IIN, GPS, and NVG-compatible lighting for the interior and exterior. This allows the crew to use NVG-compatible heads-up display (HUD)

A MC-130P, Combat Shadow. Note that this Shadow has had the STAR recovery arms removed from the nose. The MC-130P serves as an air refueling platform for SOCOM helicopters and can also be used as an insertion platform for STS teams as can be seen in the silhouettes of the team toward the rear of the aircraft.

to fly the plane. It has a FLIR, missile, and radar warning receiver to alert the crew of threats. Countermeasure devices include chaff and flare dispensers. Communications have satellite and data burst technology. In addition, the MC-130P will have in-flight refueling capability as a receiver.

Originally designated the HC-130 N/P, U.S. Air Force Special Operations aircraft were redesigned in February 1996 to correspond with all other M-series special operations aircraft.

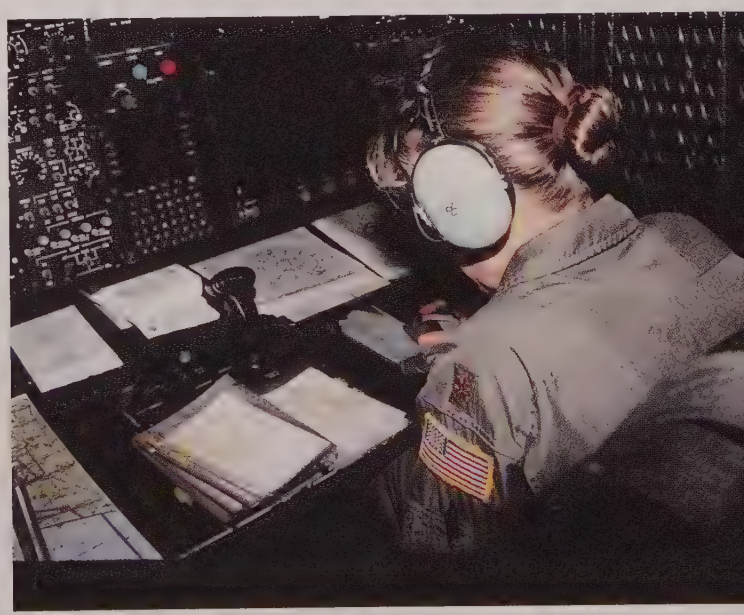
MC-130Ps have been actively employed in special operations missions since the mid-1980s. These clandestine refuelers were deployed to Saudi Arabia to support Desert Storm in 1990. They provided the necessary air refueling of Special Operations forces helicopters. This was carried out in both coalition and hostile territory. Combat Shadows were also used in psychological operations and leaflet drops. One of these leaflets carried the following admonition to Iraqi troops:

*Warning! This is only the beginning! This could have been a real bomb. We have no desire to harm innocent people, but Saddam is leading you to certain death and destruction. We want you to know the truth, Saddam is the cause. Yes, the Multi-National Forces have the ability to strike anywhere . . . and at anytime! Warning.*

Such leaflets were responsible for hundreds of Iraqi troops surrendering without a shot being fired. During the

The refueling hose of this Combat Shadow is tucked into the pod. Upon its rendezvous with the hungry "choppers," it will extend the line and prepare to off load fuel as soon as the helicopters hook up their refueling probes.

The home office of the MC-130P. The flight deck. Here, the pilot, copilot, and flight engineer carry out the mission of getting their cargo delivered. In this case it is an STT and a RAMZ drop.



Although women are not allowed in STS teams, they may be found among the aircraft pilots and crewmembers, as in the case of this young major, a navigator on an MC-130P.

course of the war, the 8th Special Operations Squadron and the 9th SOS dropped more than seventeen million leaflets. Combat Shadows have also been employed as combat search and rescue as well as command and control aircraft.

### *MC-130P Specifications*

**Contractor:** Lockheed; **powerplant:** four Allison turboprop engines T56-A 15; **thrust:** 4,910 equivalent shaft power; **wingspan:** 132 feet, 7 inches (40.4 meters); **length:** 97 feet, 9 inches (29.8 meters); **height:** 38 feet, 6 inches (11.7 meters); **speed:** 289 miles per hour (at sea level); **range:** approximately 4,000 nautical miles, unlimited with air refueling; **ceiling:** 33,000 feet; **maximum takeoff weight:** 155,000 pounds (69,750 kilograms, peacetime), 175,000 pounds (wartime); **crew:** eight total—four officers (pilot, copilot, primary navigator, and secondary navigator), and four enlisted (flight engineer, communications operator, and two loadmasters).

### *EC-130E Rivet Rider Commando Solo*

The Commando Solo, formally known as the Volant Solo, is flown by the 193rd Special Operations Group. It is the only AFSOC asset that is an Air National Guard entity. It has seen action from Operation Urgent Fury in 1983 during the assault on Grenada, to Operation Just Cause in 1989 in Panama. It served as the "Voice of the Gulf" during Operation Desert Storm in 1991, convincing Iraqi soldiers to surrender; and also in Operation Uphold Democracy in 1994 as a broadcasting platform during the Haitian uprising.

As the name implies, the Commando Solo works alone. It is capable of conducting day and night overt or covert operations. The primary mission of the EC-130 is to conduct

Senior Master Sgt. Tom Deffley directs the crew of an EC-130E Commando Solo aircraft of the 193rd SOW as they taxi out for takeoff on a mission over Iraq in 1998. The Commando Solo was deployed to the Southwest Asia area of operations in support of Operation Southern Watch, which is the U.S. and coalition enforcement of the no-fly-zone over Southern Iraq. During the GWOT, the aircraft would be deployed to broadcast messages to the local Afghan population and Taliban soldiers during Operation Enduring Freedom. Most recently, the Commando Solo has been deployed to the Middle East in support of Operation Iraqi Freedom. *U.S. Air Force*

The EC-130 Aircraft is jammed with electronic gear, from communications to telecommunications equipment. The country of Iraq is a prime area of operations for the Commando Solo. Since there is no FCC in the country, the crew has a free hand to exploit their skills to the fullest, whether it is operating a radio or television station. Here, members of the 4th Psychological Operations Group, 193rd Special Operations Wing, Pennsylvania Air National Guard, broadcast television and radio programming from onboard an ANG EC-130J "Commando Solo" aircraft, in support of Operation Iraqi Freedom. *U.S. Air Force*

psychological operations, civil affairs broadcast missions, and electronic countermeasures. This is accomplished by using standard AM/FM radio, HF/shortwave, TV, and tactical military communications frequencies while loitering outside the lethal range of any weapons possessed by enemy forces. The crew of the Commando Solo will carry out its PSYWAR mission both day and night, operating at the maximum altitudes to achieve maximum possible transmission into the given area of operation. Typical mission parameters will find a single EC-130E circling the target audience, whether it be military or civilian.

The EC-130 is not only capable of jamming enemy signals and communications, but it is also effective in pinpointing any attempts to jam communication by the enemy. Once the source is located, this information is passed on to the appropriate chain, and the electronic threat can be neutralized. If the enemy signal is something other than just noise, an alternate option would allow the enemy force to continue communicating and intercept their communications. Alternate missions include command and control, communications, countermeasures (C3CM), and occasionally intelligence gathering.

Overflowing with highly sophisticated electronics and mission-critical specialized modifications, the EC-130E incorporates enhanced navigation systems, self-protection equipment, secure fax machines, and computers. In addition to these devices, there are VCRs, cassettes, compact discs, and powerful transmitters that are capable of broadcasting color television on a multitude of worldwide standards, throughout the TV VHF/UHF ranges.

During the GWOT the EC-130 would again be pressed into service. The aircraft and crews perform a wide variety of missions. Whether the mission called for broadcasting messages to the Taliban and al-Qaeda forces in

Afghanistan, or dropping leaflets in Iraq, the Commando Solo would be on station.

In 2006 the E model was replaced by the J model, which feature enhanced navigation systems, self-protection equipment, air refueling, and the capability of broadcasting radio and color TV on all international standards.

## *EC-130E Specifications*

**Contractor:** Lockheed; **powerplant:** four Allison turboprop engines T56-A15; **thrust:** 4,910 equivalent shaft power; **wingspan:** 132 feet, 7 inches (40.4 meters); **length:** 100 feet, 6 inches (30.9 meters); **height:** 38 feet, 6 inches (11.7 meters); **speed:** 299 miles per hour (at sea level); **range:** approximately 2,100 nautical miles (3,380 kilometers), unlimited with air refueling; **ceiling:** 20,000 feet; **maximum takeoff weight:** 155,000 pounds (69,750 kilograms); **crew:** 11 total—four officers (pilot, copilot, navigator, mission control chief/electronic warfare officer) and seven enlisted (flight engineer, loadmaster, and five mission crew).

## *EC-130J Specifications*

**Primary mission:** Psychological and information operations; **Contractor:** Lockheed; **powerplant:** four Allison six-blade turboprop engines; **thrust:** 6,000 equivalent shaft power; **length:** 97.75 feet (29.7 meters); **height:** 38.8 feet (11.8 meters); **wingspan:** 132.6 feet (40.3 meters); **cruise speed:** 335 miles per hour; **ceiling:** 28,000 feet (8,534 meters); **maximum takeoff weight:** 155,000 pounds (69,750 kilograms); **range:** 2,300 nautical miles without refueling; **crew:** ten total—four officers, (pilot, copilot, flight systems officer, mission systems officer), and six enlisted (loadmaster, five electronic communications systems operators).

MH-53J Pave Low III E helicopter of the 20th SOS, call sign "Cowboy Zero-3." Having just dropped off a special tactics team and U.S. Army Rangers, the Pave Low prepares to take off and assume an orbit over the SOF operators. It will be on station to provide close air support (CAS) when called on by the team on the ground.

## *MH-53J Pave Low III*

The mission of the MH-53J is to carry out low-level, long-range, undetected ingress into denied or hostile areas. This is accomplished day or night, even under the worst weather conditions for infiltration, exfiltration, and resupply of Special Operations forces.

Like its forerunner, the Sikorsky HH-53 Jolly Green Giant of the Vietnam era, the MH-53J Pave Low III Enhanced is the main helicopter in service with the Air Force Special Operations Command. Unlike its predecessor, it has been modified and augmented with state-of-the-art technology that the Jolly Green pilots would have killed for in their day.

The Pave Low is the largest and most powerful helicopter in the U.S. Air Force inventory and the most technologically advanced helicopter in the world. Forward-looking infrared, inertial GPS, Doppler navigation systems, a terrain-following/avoidance radar, an on-board computer, and integrated advanced avionics enable it to achieve precise, low-level, long-range penetration into denied areas, day or night, in adverse weather and over hazardous terrain without detection.

In the spring of 1999, AFSOC began modifying the MH-53J Pave Low with interactive defensive avionics system/multi-mission advanced tactical terminal (IDAS/MATT). This modification will provide the air crews with a heightened level of readiness and efficiency. The new designation for the Pave Low helicopters with this modification is the M model. This system is a color, multifunctional, night-vision-compatible, digital map screen. Located on the helicopter's instrument panel, the display gives the crew a more concise view of the battlefield and instant access to real-time events. The helicopter's flight path, manmade obstacles such as power lines, and even hostile threats "over the horizon" are depicted in an easy-to-read manner.

The system receives its data from a satellite, directly into the computer. The signal is then decoded and the data is displayed in 3D color imaging of the surrounding terrain, including contour lines and elevation bands. At the push of a button the crew can visualize a digital navigational course and bearing information, in addition to the map display. Designed to give crew members a priority in consolidating the variety of functions, extra detail was taken to provide the crew easy-to-control instrument panel functions while increasing the flow of information efficiently.

Newly upgraded MH-53M Pave Low, modified with the interactive defense avionics system/multi-mission advance tactical terminal (IDAS/MATT). Although regularly modified and upgraded, these helicopters are older than most of the crews flying them. For example, this helicopter was used on the Son Tay raid into North Vietnam.

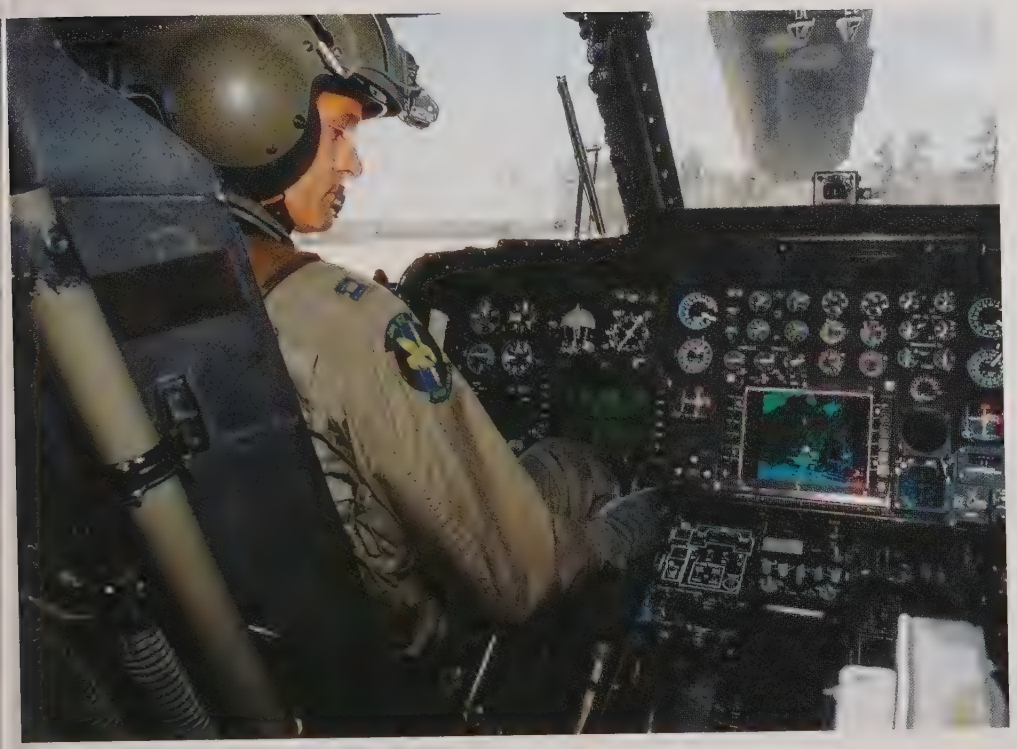
All of this high technology results in what the U.S. Air Force calls the "crew concept"; the pilot of the MH-53J gets assistance from the copilot and flight engineer. These three individuals are crammed into the flight deck, smaller than an average-sized closet. Each one has his responsibility and a section of the controls to manage. Together, they make the Pave Low maneuver in such a way that staggers the imagination, and sometimes the stomach.

Offering protection to the crew is armor plating as well as an assortment of weapon systems. Just aft of the flight deck are two 7.62mm miniguns, and at the rear of the helicopter on the exit ramp is a .50-caliber machine gun. While the mission of the Pave Low is primarily an INFIL/EXFIL platform, with all the previously mentioned weapons, it also serves as a helicopter gunship. With a combination of armor, weaponry, and maneuverability, the crew is pretty well covered.

During Operation Desert Storm, an AFSOC MH-53J guided the U.S. Army AH-64 Apaches to their targets deep inside Iraq. Flying over hundreds of miles of featureless desert, the Air Commandos led the lethal sortie directly to two Iraqi early-warning radar stations. Here, the Apaches destroyed the Iraqi ground targets using Hellfire missiles. This opened a corridor for U.S. and coalition forces to begin the air war.

In addition to providing infiltration, exfiltration, and resupply of Special Operations forces, the Pave Lows provided CSAR coverage for Coalition Air Forces in Iraq, Saudi Arabia, Kuwait, Turkey, and the Persian Gulf. An MH-53J, call sign Moccasin 5, made the first successful combat recovery of a downed pilot in Desert Storm. At the conclusion of the war, the Pave Lows would see service in Northern Iraq to support Operation Provide Comfort, assisting the Kurds, and later on with IFOR operations in Bosnia.

The MH-53J Pave Low III heavy-lift helicopter is the largest, most powerful and technologically advanced helicopter in AFSOC's inventory. It is equipped with terrain-following and terrain-avoidance radar, forward looking infrared sensor, inertial navigation system with global positioning system, as well as a projected map display enabling the crew to follow terrain contours and avoid obstacles. These advanced avionics enable the aircraft to make low-level penetration into enemy territory possible. Mounted over the tanks is the direct infrared counter measure (DIRCM) anti-missile system. *U.S. Air Force*:



In the spring of 1999, AFSOC began upgrading the Pave Low with IDAS/MATT. IDAS improves combat survivability, provides flexible integrated EW, and incorporates existing defensive systems and a cockpit-mounted digital map system (DMS). MATT is a multi-service program, real-time over-the-horizon threat and intelligence data, real-time electronic order of battle alerts and updates, and integrates visual threat data onto cockpit avionics displays. The heart of IDAS/MATT is the DMS. This adds a cockpit-mounted color multi-function display; NVG compatible, multi-function display capability for existing pilot video monitors; to guide crews through mountainous terrain; digital map screen in various scales; visual flight plot management with waypoint look ahead capability; and visual display of threat and intelligence data. Those Pave Low helicopters having been modified are now designated "M" models.

As America presses the fight in the Global War on Terrorism, the Pave Low helicopters are instrumental in providing infiltration and exfiltration of U.S. Special Operations forces. Flying numerous sorties, the MH-53 helicopters have flown in SEALs and their fast attack vehicle, Special Forces ODA along with NSTV and special tactics teams with their all-terrain vehicles.

## *MH-53J Specifications*

**Contractor:** Sikorsky Aircraft Corporation; **powerplant:** two General Electric T64-GE/100 engines; **thrust:** 4,339 shaft power per engine; **length:** 92 feet (27.88 meters); **height:** 25 feet (7.58 meters); **rotary diameter:** 72 feet (21.88 meters); **blades per hub:** six; **speed:** 195 miles per hour (312 kilometers per hour); **range:** 630 statute miles (548 nautical

Starboard gunner of the Pave Low engages the mini-gun. This 7.62mm minigun is capable of putting thousands of rounds per minute on target.

You will find no greater ride to get your heart pounding in AFSOC than on a Pave Low. The pilots of the 20th SOS can thread a needle with this ninety-two–foot helicopter. One Green Hornet pilot confesses that flying at treetop level, in the black of night, with NODs, although dangerous, is "kind of a cool thing!"

miles), unlimited with air refueling; **ceiling:** 16,000 feet (4,849 meters); **maximum takeoff weight:** 42,000 pounds (18,900 kilograms); **armament:** any combination of three 7.62mm miniguns and .50-caliber machine guns; **payload:** 38 fully equipped combat troops or 14 litters; its external cargo hook is also capable of 20,000 pounds (9,000 kilograms); **crew:** six total—two officers (pilots) and four enlisted (two flight engineers and two aerial gunners).

## *CV-22 "Osprey"*

The Osprey is a tilt-rotor vertical lift aircraft, which means it takes off like a helicopter and flies like a conventional airplane. There is nothing conventional about the Osprey, however. Development of the V-22 program began in 1981 and was originally designed for the U.S. Marines, designated the MV-22. Planned for introduction into AFSOC forces in 2003, it was not until 20 March 2006, when the U.S. Air Force took delivery of the first operational CV-22, which is the special operations variant of the MV-22.

The Commander of Air Force Special Operations Command, Lt. Gen. Michael Wooly, commented, "I think its [CV-22] is going to truly transform the way we do business by giving us rapid mobility on the battlefield for our special operators that we have not had before."

The CV-22 differs from the MV-22 with the addition of a third seat in the cockpit for a flight engineer and can be fitted with a refueling probe to facilitate midair refueling. Additionally, the AFSOC version of the Osprey will have the modern suite of electronics, like those installed in other AFSOC aircraft, items such as a terrain-avoidance (TA) and terrain-following (TF) radar. To deal with the nature of special operations, it will have enhanced EW equipment for

increased battlefield awareness, with more than 2.5 times the volume of flares and chaff, radar-jamming gear, and improved integration of defensive countermeasures. For CSAR it will have an internally mounted rescue hoist and a crew door located on the starboard side of the aircraft. Another significant difference between the AFSOC and marine version will be the amount of fuel it will carry. The CV-22 carries approximately twice the amount of fuel of the MV-22 variant.

Sources within AFSOC readily admit the Osprey was designed as a U.S. Marine aircraft, to fit inside a hanger deck of U.S. Navy LHD. One officer commented, "If we [the U.S. Air Force] had designed this aircraft it would have been larger, wider, and taller. If would be the same concept but more tactically feasible for the airlift/SOF mission."

The Osprey brings speed and range into the SOF arena. It is quick like the MC-130 and can hover like a MH-53. It allows the mission to be carried out in one period of darkness. Another benefit of the CV-22 is that it is quiet. One AFSOC officer relates, "It is like an A-10. You know it is up there, then wham! It is right on top of you. It is not like a regular helicopter where you hear the *whomp-whomp* sound of the rotor blades."

Currently, the Osprey is not armed, relying on its speed and stealth as its defense. However, there are evaluations underway to determine the possibility of adding a weapons system. The question remains, where would you place the weapon? If you position it on the starboard side, you would hit the large propellers. Mounting it on the rear ramp, you have a good chance of hitting the tail. There is discussion of a nose-mounted weapons system, but then that could affect the aerodynamics of the aircraft.

The $89 million (2005 dollars) CV-22 was to eventually replace AFSOC's entire fleet of MH-53 Pave Low and MH-60G Pave Hawk helicopters. Dispelling any rumors, the CV-22 was a replacement for the Pave Low; Brig. Gen. Michael Callan, commander of Air Force Special Operations forces (AFSOF), a warfighting command under AFSOC, stated, "It is not." There are even suggestions that it will phase out some of the MC-130E Combat Talon I and MC-130P/N Combat Shadows. However, with the introduction of the 160 SOAR(A) MH-47G and CV-22 models, the current direction of the Osprey will not be replacing the MC-130 class of aircraft anytime in the near future. Once deployed it is

The Osprey is a tilt-rotor aircraft that takes off and hovers like a helicopter then transitions to fly like an airplane. It is quick like an MC-130 and hovers like a Pave Low. Borne out of the ashes of Desert One, some call the Osprey the savior of special ops air platforms; time will tell whether the CV-22 is up to the challenging operational tempo of the SOF environment. One of the main advantages the CV-22 brings to the special operations arena is the ability to perform mission profiles in one period of darkness. *U.S. Air Force*

Operating with the 8th SOS, this unique aircraft is a dual-piloted, self-deployable, medium-lift, aircraft for joint service application. Its multi-engine tilt-rotor design combines the vertical flight capabilities of a helicopter with the speed and range of a fixed-wing airplane. Its primary mission is mobility, infiltration, exfiltration, and resupply of SOF operators around the globe. The aircraft is fully capable of operations in adverse weather, day or night, in climates from arctic to tropical, and in a variety of conventional, unconventional, and contingency combat situations, including nuclear, biological, and chemical (NBC) warfare conditions. *U.S. Air Force*

Capable of flying twenty-one hundred nautical miles with one aerial refueling, the CV-22 provides the services and advantages of V/STOL aircraft that can rapidly self-deploy to any location in the world. This would be beneficial for long-range SOF missions. In comparison, during Operation Enduring Freedom, special tactics teams and other SOF personnel were infiltrated via helicopters. This nine hundred–mile insertion required several mid-air refuelings of the helicopters; the CV-22 could have performed this mission with only one. *U.S. Air Force*

This view of the CV-22 shows how small the interior of the aircraft really is. The space is approximately equal to that of a CH-46 Sea Knight helicopter. The updated troop seats are made to withstand a crash landing. The Osprey can operate in a diverse environment; it will operate from aircraft-capable ships as well as shore sites ranging from main bases to austere forward operating locations. While an armed Osprey is being evaluated, the aircraft currently relies on speed and surprise to conduct its mission. *U.S. Air Force*

expected that fifty CV-22 Ospreys will replace up to eighty-nine current AFSOC aircraft. The mission of the CV-22 is to infil/exfil and resupply Special Operations forces in denied or enemy area in total darkness in all weather.

## *CV-22 Specifications*

**Primary missions:** Special Operations forces mobility, long-range infiltration, exfiltration, and resupply under low-altitude, adverse weather, medium up to high threat environments; **contractor:** Bell Helicopter Textron, Inc., and Boeing Company, Defense and Space Group, Helicopter Division; **powerplant:** two Rolls Royce–Allison AE1107C turboshaft engines; **thrust:** 6,200 shaft horsepower per engine; **length:** 57 feet, 4 inches (17.4 meters); **height:** 22 feet, 1 inch (6.73 meters); **wingspan:** 84 feet, 7 inches (25.8 meters); **rotary diameter:** 38 feet (11.6 meters); **blades per hub:** three; **speed:** 218 miles per hour (230 knots) (cruising speed); **ceiling:** 25,000 feet (7,620 meters); **maximum vertical takeoff weight:** 52,870 pounds (23,982 kilograms); **maximum rolling takeoff weight:** 60,500 pounds (27,443 kilograms); **self-deploy range:** 1,500 nautical miles with internal auxiliary fuel tanks and no refueling. More than 2,500 nautical miles is possible with one aerial refueling and auxiliary tanks; **payload:** 24 cargo troops, 12 litters or 20,000 pounds internal, external load of 10,000 pounds (4,536 kilograms) on single cargo hook, 15,000 pounds (9,221 kilograms) dual cargo hook; **crew:** four total—twp officers, pilot, copilot, and two enlisted (flight engineers).

## *U-28A*

One of the newest additions being seen on the tarmac at Hurlburt Field is the U-28A. This single-engine aircraft is the

The CV-22 has a crew of four, with two pilots who sit side by side in the cockpit. It has the capability of providing a long-range infiltration/exfiltration platform for the special tactics teams as they head into the Global War on Terrorism. Early plans called for the aircraft to service as a replacement for AFSOC's fleet of MH-53 Pave Lows and some of the MC-130 aircraft. However, with the introduction of the MH-47G and CV-22 models, the current direction of the Osprey will not be replacing the MC-130 class of aircraft anytime in the near future. *U.S. Air Force*

military version of the Swiss-made Pilatus PC-12 transport. Its mission is to provide insertion and extraction support for Special Operations forces. The aircraft has a crew of two, but can be flown by one pilot.

The plane was selected for its versatile performance and ability to operate from short and unimproved runway surfaces. It is deployed when the airfields will not accommodate the larger MC-130 aircraft or due to the clandestine nature of the mission the smaller aircraft is more desirable.

Activated on 1 October 2005, the 319th Special Operations Squadron currently operates six U-28As, with approximately forty-five airmen to fly and maintain the aircraft. The turboprop U-28A can operate from shorter runways than a C-130, and, just like the larger aircraft, can land on austere fields such as dirt and grass strips. It can carry a payload of up to nearly three thousand pounds. The aircraft is equipped with weather radar and a suite of advanced communications and navigation gear.

## *U-28A Specifications*

**Primary mission:** intra-theater support for Special Operations forces; **contractor:** Pilatus Air Ltd.; **powerplant:** one Pratt & Whitney PT6A-67B turboprop; **thrust:** 1,605 shaft horsepower (shp) flat-rated to 1,200 shp; **length:** 47 feet, 3 inches; **height:** 14 feet; **wingspan:** 53 feet, 3 inches; Max **cruise speed:** 270 knots true airspeed; **max payload:** 2,973 pounds; ceiling: 30,000 feet; **maximum takeoff weight:** 9,920 pounds; **ground roll:** 1,475 feet at max takeoff weight; **range:** 1,513 nautical miles; **crew:** two pilots; however, the aircraft can be flown by one.

**Right, top:** Operating with the 319th Special Operations Squadron is the Pilatus PC-12; manufactured by Pilatus Aircraft Ltd. Switzerland. Officially called the U-28A, the primary mission of this propeller-driven aircraft is the intra-theater operations in support of U.S. SOF teams deployed in the GWOT. This small aircraft is employed in the infiltration, exfiltration, and resupply of SOF units in austere and remote locations where the mission does not call for the deployment of an MC-130E/H Combat Talon. *U.S. Air Force*

**Bottom:** The 3rd SOS operates the MQ-1 Predator unmanned aerial vehicles. The UAVs have been instrumental in the increase of battlefield awareness at operating locations in support of Operations Enduring Freedom and Iraqi Freedom. The primary mission of the Predator is armed reconnaissance. During OIF, a battlefield airman was able to see real-time imagery from a Predator, which resulted in the elimination of enemy mortar teams posing a threat to friendly forces. This MQ-1 UAV is armed with two AGM-114 Hellfire missiles to immediately act on any intelligence gathered. *U.S. Air Force*

## *MQ-1 Predator*

The Air Force Special Operations Command reactivated the 3rd SOS on 28 October 2005; the squadron is known as the Dragons after the old Vietnam era AC-47 "Puff the Magic Dragon." AFSOC was tasked with the mission to fill the requirements for Predator full-motion video (FMV) to support the troops on the ground. By deploying the Predator, it brings all elements into play as SOF teams hunt down a wary and elusive enemy. The UAV allows for the acquisition of real-time target data transmitting back and forth between the UAV, command and control, the STS team on the ground and to orbiting AC-130 gunship or other CAS platforms.

In response, significant expansion to Predator operations is planned in the coming years and some of that support will be dedicated to SOF operations. AFSOC, as the air component of USSOCOM, maintains a close relationship with the command's SOF ground components. This personal level relationship is an important ingredient to effective operations. Fielding a Predator force structure within AFSOC represents the quickest, most cost-effective, most supportable, and most sustainable means of providing FMV support to SOF on the ground.

AFSOC currently operates the MQ-1; however, coming on line is the MQ-9 Reaper. The MQ-1 Predator is a "Killer Scout" where the MQ-9 Reaper is a "Hunter Killer." The Reaper is designed to hunt down high-value targets and destroy time-sensitive targets with persistence and precision. The MQ-9 is a completely different aircraft; three times as fast, it can fly twice as high, and can carry fifteen times the external payload. The primary mission of the Predator is armed reconnaissance. Though the full combat load of a MQ-9 will vary depending on the munitions selected, it can carry up to fourteen AGM-114 missiles as well as laser-guided bombs like the GBU-12.

The MQ-1 Predator is a medium-altitude, long-endurance, remotely piloted aircraft. The MQ-1's primary mission is interdiction and conducting armed reconnaissance against critical, perishable targets. The Predator brings persistent surveillance and strike without risking a manned

aircraft to the SOF area of operations. It is operated from a control van, officially called Mobile Ground Control Station; it is affectionately known as "dumpster." All members of the Predator control and support team are assigned to AFSOC. The personnel who operate the Predators are called pilots; and yes there are women on the Predator team. The basic crew is one pilot and two sensor operators.

Operational control of the UAV can be performed in theater or operated from within the continental U.S. During OEF, a special tactics team was in contact with the pilot of an MQ-1 providing them with imagery. The team leader inquired where the pilot was operating out of and he was told back in the states.

The entry of the UAV has brought one more level into the vertical battlespace (i.e., B-52s, AC-130, Helicopters, and CAS). The Predator team related: "Deconfliction with manned aircraft is a top priority. In theater, we communicate with the control and reporting center and are assigned altitudes just like any other aircraft. If necessary, we can move to allow strike aircraft to engage targets."

### *MQ-1 Predator Specifications*

**Primary missions:** armed reconnaissance, airborne surveillance, and target acquisition; **contractor:** General Atomics Aeronautical Systems, Inc.; **powerplant:** Rotax 914 four cylinder engine producing 101 horsepower; **length:** 27 feet (8.22 meters); **height:** 6.9 feet (2.1 meters) **weight:** 1,130 pounds ( 512 kilograms) empty; **maximum takeoff weight:** 2,250 pounds (1,020 kilograms); **wingspan:** 48.7 feet (14.8

The MQ-9 Reaper is the U.S. Air Force's first hunter-killer UAV. It's larger and more powerful than the MQ-1 Predator and is designed to go after time-sensitive targets and destroy those targets with five hundred–pound bombs and Hellfire missiles. The Reaper can stay airborne for up to fourteen hours fully loaded and carries more than fifteen times the ordnance of the Predator, flying almost three times the Predator's cruise speed. *Courtesy of General Atomics Aeronautical Systems, Inc.*

meters); **speed:** Cruise speed around 84 mph (70 knots), up to 135 mph; **range:** up to 400 nautical miles (454 miles); **ceiling:** up to 25,000 feet (7,620 meters); **fuel capacity:** 665 pounds (100 gallons); **payload:** 450 pounds (204 kilograms); **armament:** AGM-114 Hellfire missiles.

## *MQ-9 Reaper Specifications*

**Primary missions:** armed reconnaissance, airborne surveillance, and target acquisition; **contractor:** General Atomics Aeronautical Systems, Inc.; **powerplant:** Honeywell TPE-331-10T turboprop; 670 kW (900 shaft horse power); **length:** 36 feet (10.97 meters); **height:** 11 feet 8 inches (3.56 meters); **weight:** 10,000 pounds ( 4540 kilograms); **wingspan:** 66 feet (20.12 meters); **speed:** Cruise speed around 405 km/h mph (220 knots); **ceiling:** up to 25,000 feet (7,620 meters); **Armament:** AGM-114 Hellfire missiles and GBU-12 laser-guided bombs.

Chapter 6

# SPECIAL TACTICS SQUADRONS

The U.S. Army has the Rangers and the Special Forces (the Green Berets). In the U.S. Navy the special operators are the SEALs and special boat teams. Rounding out the full force of the U.S. Special Operations forces on the ground are the men of the U.S. Air Force Special Operations Command special tactics squadrons. Referred to as special tactics teams (STTs), they are a combination of combat controllers, pararescuemen and, on occasion, Special Operations weather teams. The STT is an integral part of the U.S. Special Operations Command and its missions. STT members frequently operate with the U.S. Navy SEALs, U.S. Army Rangers, and U.S. Army Special Forces units in SR, CSAR, and DA (i.e., airfield seizure), to name just a few of their capabilities. Every member of the STS teams is a volunteer. These highly motivated, proficient STTs are capable of being deployed by sea, air, or land often weighed down with one hundred to one hundred fifty pounds of equipment to execute their mission. These units will be found regularly on missions alongside the U.S. Army and U.S. Navy SOF troops. Whether they fast rope in with a company of Rangers, perform a high-altitude low-opening (HALO) parachute in with a Special Forces "A-team," or insert via submarine with a SEAL platoon, STS teams are qualified in these skills and add a lethal element to U.S. Special Operations forces.

## *Special Tactics Combat Control and Pararescue*

Operating under the AFSOC, the special tactics squadrons are comprised of combat controllers and pararescuemen. These men are proficient in sea-air-land insertion tactics into forward, nonpermissive environments. The CCTs establish assault zones with an air traffic control capability. Assault zones could be a drop zone for a parachute deployment, a landing zone for heliborne operations, or a follow on fixed-wing aircraft. It could also be an extraction or low-level resupply.

The CCTs specialize in air traffic control. When it is given the "go" signal, it can place numerous forms of lights—visible and infrared—that can be controlled by CCT members as easily as you would use your TV remote on your home theater system. The combat control teams are also responsible for ground-based fire control of the AC-130 gunships and helicopters of AFSOC, as well as for all air assets, including U.S. Army and Navy aircraft. In addition to these capabilities, CCTs provide vital command and control capabilities in the forward AO and area qualified in demolition to remove obstructions and obstacles to the landing or drop zone.

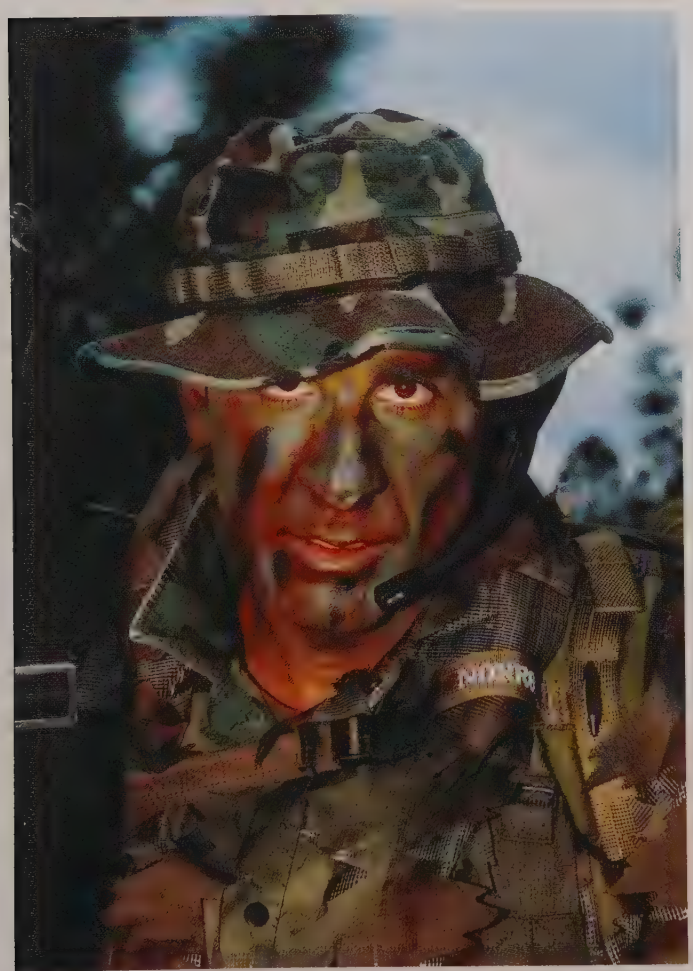
The ratio of CCTs to PJs will vary with the mission profile and who the STT will be attached with (i.e., Rangers, SEALs, Special Forces, and so on). If the mission is a combat search and rescue, then the team would be pararescue jumper "heavy"; whereas, if the task is to take down an airfield and hold it, the team would then be made up primarily of CCTs. Each mission profile is unique and the special tactics teams are highly skilled in overcoming, adapting, and improvising to meet their objectives.

While the combat controllers are busy with their tasks, the PJs provide any emergency medical care necessary to stabilize and evacuate injured personnel. The PJs are the ones who will establish the overall combat search and rescue operations, planning, and procedures. The pararescuemen of the STS will provide triage and medical treatment for follow-on forces. To say that these individuals are highly skilled would be an understatement. They are instructed in the latest

**Left:** Skilled in the art of small unit tactics, a CCT and PJ patrol though the brush performing a reconnaissance and surveillance, or R and S. With the weapons at the ready, they are poised to engage any threat crossing their path.

medical procedures in combat and trauma medicine. When they are not jumping into remote hostile environments, or in training in a joint task force field training exercise (FTX), you might find them riding along with EMS units in large urban areas. Such cities have high incidents of gunshot wounds and similar injuries, so they may get further experience to take into the field.

During Operation Just Cause, the special tactics squadrons were with the Rangers in the raid on Rio Hato. CCTs perform air traffic control and special air assets fire control. PJs were there to provide emergency medical assistance and triage evaluation with the Rangers. CCT members were also with SEAL Team 4 at Patilla Airport.



Special tactics squadrons are a combination of combat controllers, pararescuemen, and at times Special Operations weathermen. These highly trained battlefield airmen are experts in ATC, CAS, and emergency trauma medicine. They can often be found attached with U.S. Army Special Forces, Rangers, and U.S. Navy SEALs, and have been known to operate with SAS units. *U.S. Air Force*

CCTs provided the air traffic control in Saudi Arabia and virtually ran the King Fihad Airport during Desert Shield. At the beginning of "The Storm" they conducted missions that assisted in opening the air corridor for U.S. and coalitions aircraft.

Members of the 24th STS were with Task Force Ranger in Somalia. For their actions during the firefight, combat controller Tech. Sgt. Tim Wilkinson was awarded the U.S. Air Force Cross for extraordinary heroism, Master Sgt. Jeffery Bray, and Master Sgt. Scott C. Fales, both PJs, received Silver Stars for gallantry.

During Operation Restore Democracy, while network news crews showed the U.S. helicopters settling into an LZ in Haiti and being heralded as "the first Americans to land on Haitian soil," members of the AFSOC/STS had already been on the ground for days, surveying HLZ and setting up lighting for the heliborne troopers.

There are six STS units worldwide, with approximately three hundred combat controllers and pararescue jumpers combined throughout the U.S. Air Force. The 21st STS is stationed at Fort Bragg, North Carolina; the 24th STS is at Pope Air Force Base, North Carolina; the 22nd STS is at McChord Air Force Base, Washington; the 23rd is at Hurlburt Field, Florida; the 320th STS is at Kadena Air Base, Japan; and the 321st STS is at RAF Mildenhall, England. Each squadron has three teams; each team comprises 18 enlisted and two officers. One half of the team will be qualified as combat controllers and the other half pararescue. Currently, there are more combat controllers in the squadron than there are PJs.

## *Pararescue Origins*

Today's pararescuemen can trace their lineage back to a remote jungle close to the China-Burma border during a summer in World War II. Here, 21 persons were forced to bail out of a disabled C-46 in the hot month of August 1943. The area was so isolated that the only possible way to get to the survivors was a parachute drop. Lt. Col. Don Fleckinger, along with two medical personnel, volunteered to make the jump. From this mission the concept of pararescue was born.

In the early fifties, with the formation of the Air Rescue Service, and subsequently in 1956, into the reorganized Air

Rescue and Recovery Service, PJs, or *para-jumpers* as the name denotes, have been prepared to make the ultimate sacrifice to uphold their motto, "That others may live." Trained in parachuting, mountaineering, and medical techniques, these men would provide the rescue capability for both military and civilian rescues.

U.S. Air Force PJs have also been instrumental in the recovery of astronauts in the space program of the United States. Pararescuemen have worked with NASA since the early Gemini programs of the sixties. They were present to support Skylab missions and currently are on call to provide rescue support to the space shuttle program.

It was in 1966 that U.S. Air Force Chief of Staff Gen. John P. McConnell approved the wearing of the maroon beret for pararescue forces. The maroon beret symbolizes the blood sacrifices by PJs and their devotion to duty in coming to the aid of others.

A considerable benefit to the PJs was the introduction of combining parachuting capability with scuba techniques. It is not uncommon for a pararescueman to be loaded with up to one hundred pounds of equipment when he is ready to make his jump. According to Master Sgt. Ron Childress (ret.), "It was not uncommon for the PJs to put the survivor on the penetrator under heavy fire and be killed in action . . . to effect the survivor recovery."

During the Vietnam War, PJs accompanied the Jolly Green helicopters in the search and rescue of downed pilots. These men operated the jungle penetrators as well as the onboard weapons. It was not uncommon for a PJ to ride the hoist down to an injured pilot, with M-16 in hand, and secure the wounded man to the penetrator and hold him secure as they rode back up to the relative safety of the hovering helicopter.

During Operation Just Cause in 1989, pararescuemen were among the first U.S. combatants to parachute into Panama. Their medical expertise was called upon continually during this short operation, as they recovered and treated the majority of U.S. Army Rangers who had taken two Panamanian airfields in the first hours of the invasion. Speeding up and down the runway in their specially designed rescue all-terrain transport (RATT), the PJs collected the casualties and brought them to a collection point. At this location the pararescuemen performed triage and provided the necessary medical attention until MedEvac could be arranged. All this time firefights were going on around them while they cared for their wounded.

The PJs were on call during Operations Desert Shield and Desert Storm in the Persian Gulf. It was during the Gulf War that the pararescuemen would penetrate into hostile territory to recover a downed F-14 navigator. Pararescue also provided support for the airlift operations after the war to the Kurdish refugees fleeing into northern Iraq.

In the Global War on Terrorism, the PJs continued to carry out their mission in Operations Enduring Freedom and Iraqi Freedom. The training of a pararescueman is a constant process. They continuously endeavor to perfect current techniques as well as develop new procedures. Whether scaling the face of a mountain, doing a HALO jump at twenty-five

Having reached their recon position, this combat controller uses a PRC-117 SATCOM radio to communicate information back to headquarters. Across his knee rests his M4A1rifle, just in case.

thousand feet, racing down the tarmac of some foreign airfield, or suspended from a cable of an MH-53 Pave Low over a distressed vessel in the Pacific, the PJs will accomplish their tasks at all costs.

## *CCT Origins*

The need for combat controllers surfaced in the early air campaigns of World War II. During several major parachute assaults, the paratroopers fell short of their drop zone. This resulted in troopers being scattered as much as thirty miles from the drop zone. It became quite evident that effective guidance and control of the air transports were required. The U.S. Army created and trained a company-sized group of scouts who were parachute qualified. This unit became known as Pathfinders. Their mission was to precede the main assault force to the drop zone. Once on the ground they would use lights, flares, and smoke pots to provide a visual guide and weather information to the incoming planes.

In the fall of 1943 Pathfinders were first employed during the airborne reinforcement of allied troops in Italy. Minutes before the main body reached the designated area, the Pathfinders hit the ground and established the drop zone for the follow-on paratroops. These CCT forerunners, the Pathfinders, proved instrumental in the D-day invasion of Europe as they prepared the way for elements of the 82nd and 101st Airborne Divisions.

On 18 September 1947 the U.S. Air Force was officially established. The air force assumed responsibility for tactical airlift support of U.S. Army forces. Air force Pathfinders were later called combat control teams and were activated in January 1953. This newly organized group provided navigational aids and air traffic control for the expanding airlift forces. These teams remained under aerial port squadrons until 1977. In 1984, CCTs were restructured and assigned to the numbered U.S. Air Forces (e.g., 8th Air Force), and in 1991 they were placed under the control of host wing commanders.

Since their activation, CCTs have seen action worldwide. Combat controllers participated in the Lebanon crisis (July–October 1958), the Congo uprising (July–October 1960), the Cuban Missile Crisis (October 1962), the China-India confrontation (November 1962–September 1963), and during the Vietnam War (1967–1975).

It was also during the Vietnam War that the CCTs emerged as one of the U.S. Air Force's premiere units. Their exploits in Southeast Asia helped form the basis of current combat control operating methods. They were qualified as air traffic controllers, parachutists, and in emergency first aid. They also received training in communications, small unit patrolling techniques, and ambush and counter-ambush tactics. It was the CCTs who established drop zones and landing zones. Here, the basis of operating methods was developed and refined as used by today's combat control teams.

Combat control teams could be found collocated in isolated U.S. Army Special Forces camps scattered throughout Vietnam. Here, these air commandos called in air strikes to support the Green Beret camps, or guide a C-123 Fairchild or C-130 Hercules down the airstrip for a much-needed resupply run. Such beginnings have evolved into the close bond between the STS units and other Special Operations forces.

It has been reported that combat control teams were used in clandestine missions near the Ho Chi Minh Trail. These special operations troops would locate enemy convoys, then call in Air Commando gunships, such as "Puff," "Spooky," or other Spectres, to attack the column, thus severing the Communist supply line to the south and the North Vietnamese Army (NVA).

From 1967 through 1972 combat controllers saw action throughout the Vietnam theater of operations. They ensured mission safety, expedited air traffic flow, and coordinated with airlift control units. CCTs were the last troops to be evacuated from the beleaguered outpost at Khe Sahn. Two U.S. Air Force combat controllers were among the last Americans to be airlifted from the U.S. Embassy when Saigon fell in 1975.

Prior to Operation Eagle Claw, a lone combat controller performed reconnaissance and surveillance (R&S) of Desert Site One. The mission planners had scores of aerial photographs, but they needed HUMINT, someone on the ground. In early April 1980, Maj. John T. Carney, Jr., was delivered to the Iranian wasteland via a Central Intelligence Agency aircraft.

The major pulled a small motorcycle from the plane. Equipped with a pair of night-vision goggles, a shovel, and

some beacons, he began to survey the proposed landing site. Major Carney paused from time to time to take a core sample of the desert sand. This was later analyzed to determine if the location could support the weight of the Sea Stallions and Hercules that would bring in Colonel Beckwith's rescue force.

It was for this mission that the "box and one" lighting method was deployed. Setting up his strobes in a box pattern approximately ninety feet apart, then placing the fifth at the end of the landing zone five thousand feet away, he marked the end of the LZ. Thus, Major Carney's team of combat controllers had given him a tool where five strobes would do the job that was normally done by more than two dozen. With the light bags burred below the surface, Carney took one more survey of the area before loading his motorcycle into the CIA Otter and extracting from Iran.

When the aircraft containing the assault force arrived for the actual mission, the pilots hit the remote and the five lights lit up the landing zone below. The mission of the combat controller was a success, one of the few of Operation Eagle Claw. Operation Rice Bowl, the planning of the rescue mission and the successful execution of the R&S by Major Carney, is viewed by those in the AFSOC as the birth of the special tactics teams.

Combat controllers jumped with the U.S. Army Rangers in Grenada in Operation Urgent Fury in 1983 and again as the United States invaded Panama in 1989 in Operation Just Cause. While their PJ teammates tended the wounded, CCTs called in air strikes from AC-130H gunships in support of the Rangers' operations. Combat controllers would be with the Rangers and Delta in support of Task Force Ranger in Somalia.

After the 9/11 attacks, combat controllers were among the first U.S. Special Operations forces on the ground in Afghanistan. In support of Operation Enduring Freedom the controllers were often attached to U.S. Army Special Forces ODA to provide CAS against the Taliban and al-Qaeda forces. They are also active in various missions in Operation Iraqi Freedom.

Whether it was on a trodden-down cow pasture in Europe in World War II where they lit smoke pots to mark the landing field, an isolated Special Forces camp in the central highland of Vietnam, or prosecuting GOWT in the wasteland of Afghanistan, combat controllers have been and continue to be an integral part of the success of special operations.

Today, combat control teams are ground combat forces assigned to the special tactics squadrons of the U.S. Air Force Special Operations Command. These highly trained CCTs are organized and equipped to establish and control the air-ground interface in the objective area rapidly. These functions include assault zone assessment and establishment,

The extreme in low-level insertion, going in on foot. STT are trained to utilize GPS, maps, a compass, and even the stars to navigate from point-to-point to accomplish their mission. If you look under the floppy hats, you can see the "secrette," this is the communications headgear used with the inter-team radios. These two STS team members wear a new type of 3D camouflage. This "cammo" has leaf patterns attached to break up any silhouette and allow them to disappear into the surrounding foliage.

The water, like special operations, is unforgiving. Those going into STS will learn the latest techniques in open circuit SCUBA and close circuit, as the Draeger re-breather. Here a combat controller emerges from the water wearing a LAR-V re-breather. The LAR-V will leave no telltale bubbles on the water's surface to give away the STT location during an underwater insertion.

Special tactics teams receive Military Free Fall training at Ft. Bragg and Yuma Proving Grounds. Wearing a Gentex helmet with oxygen in place, this PJ is armed with a Colt M4A1carbine and an ACOG scope mounted on top, in place of the carrying handle, which is part of the SOPMOD kit.

air traffic control command and control communications, and special operations terminal attack control. In the event that the runway or airfield must be cleared of obstacles, the CCT units are trained in removal and equipped with demolitions that allow them to accomplish such a task. Combat control teams may be deployed with air and ground forces in the execution of direct action, special reconnaissance, austere airfield, combat search and rescue, counterterrorism, foreign internal defense, and humanitarian assistance operations.

Combat controllers' roles and responsibilities are to plan, organize, supervise, and establish air traffic control at forward airheads. They will select or assist in selecting sites and marking assault zones (drop, landing, or recovery) with visual and electronic navigational aids for day and night air-land and air-drop operations. The CCT will operate portable and mobile communications equipment and terminal and en route air navigation aids required to control and support air traffic in these forward areas. These teams will evaluate and relay the status of assault zones to inbound aircraft as well as higher headquarters. Such reports may include limited weather observations, including surface and altitude wind data, temperature, and cloud heights. CCTs control vehicular traffic in the airport area, in the air, and on the runway and taxiways. They also monitor air navigational aids and maintain qualification of primary assigned weapons.

Land navigation is essential to the skills of an STS member. Both PJs and combat controllers will become experts in using a map and a compass. They will also become familiar with celestial navigation. While they are issued GPS units and are quite adapt in their use, they must always be able to travel from point-to-point relaying on low-tech alternatives.

The CCT on the ground is "the" air traffic controller. He regulates en route and airhead air traffic and initiates, coordinates, and issues air traffic control clearances, holding instructions, and advisories to maintain aircraft separation and promote safe, orderly, and expeditious air traffic flow under visual or non-radar flight rules. Whether using the radio in his truck or the tactical air navigation (TACAN) unit attached to the rear of a quad, he conducts ground-to-air communication. Visual and electronic systems are used to control and expedite the movement of aircraft while en route, arriving, and departing from the airhead. The CCT will interface with pilots, issuing advisories on air traffic control, weather, and wake turbulence. He directs actions in handling aircraft emergencies during special tactics team deployments to support contingency operations. He'll coordinate clearances, instructions, advisors, and air traffic movement with forward and rear area commanders. Combat controllers are instrumental in providing close air support with AFSOC assets. Combat controllers may receive advance training and become qualified in Special Operations tactical air control (SOTAC), allowing them to provide CAS with the "fast movers."

Further, the CCT establishes and operates forward communication facilities and supervises and establishes high-frequency, satellite, or other long-range C41 links between forward and rear area commanders. The CCT will develop terminal instrument procedures for assault zones, including gathering current ground intelligence in forward airhead areas. Combat controllers coordinate with pararescue personnel on casualty and patient staging and collection point for expeditious medevac.

Special tactics squadron combat controllers may be deployed into forward area and forward operating locations in special operation missions, personnel recovery, CSAR, and fire support duties. Along with the removal of obstacles with explosives, there may be an occasion when the CCT would be called upon to "sanitize" a crash site. While the task of "blowing up" a downed aircraft normally falls under the responsibility of other operators (e.g., Rangers, SEALs, Special Forces, and so on), CCTs are fully capable of carrying out such a task if necessary. The special tactics CCTs are definitely one of the USSOCOM's most lethal weapons.

### *10th Combat Weather Squadron*

Assigned to the 720th Special Tactics Squadron is the 10th Combat Weather Squadron. Its mission is to provide meteorological and oceanographic information in and for the special

operations theater of operations. Their functions include tactical infiltration, data collection, analysis and forecasting, mission tailoring of environmental data, and operating jointly with a host nation's weather personnel. CWS personnel perform this job from a forward-deployed base or at times from behind enemy lines using tactical weather equipment and an assortment of communications equipment.

CWS operates with subordinate units of the U.S. Army's Special Operations Command (USASOC), Special Forces Command (USASFC), and Civil Affairs/Psychological Operations Command (USACAPOC). The CWS trains and maintains readiness of assigned forces to conduct special combat operations anytime, anywhere, independently, or attached to USASOC units.

The combat weather squadron can trace its lineage to air and ground combat and Special Operations since 1943. One of the earliest commanders of the squadron was Lt. Col. (later Brig. Gen.) Richard Ellsworth. He and the 10th WS operated with Col. Phillip Cochran's 1st Air Commando Group, Brig. Orde Wingates Chindit's (long-range penetration teams), and Brig. Gen. Frank Merrill's 5037th Composite Infantry Provisional ("Merrill's Marauder"). The nature of weather on operations in the China-Burma-India Theater demanded the use of small weather teams inserted to provide observations from deep within enemy territory.

In June 1966 the 10th WS was reactivated at Udorn Airfield, Thailand, to conduct combat weather operations in Southeast Asia. The squadron also trained indigenous personnel and set up clandestine weather observation networks throughout the region. Tenth Weather Squadron personnel were key players in many successful special operations, including the Son Tay raid, America's attempt to rescue POWs from a prison camp in North Vietnam. Timing for the "raid" was advanced by twenty-four hours based on the forecast done by 10th WS.

Special Operations weather teams provide time-sensitive forecasting with a direct effect on a combatant commander's decisions. During one of the first airdrops into Afghanistan, with less than an hour before the drop a dust storm threatened to abort the insertion. The SWOT on the ground radioed back, "Sit tight. This will pass in about fifteen minutes." The MC-130 aircraft loaded with 75th Regiment Rangers continued on its flight plan. Just as the weathermen had forecasted, the dust storm cleared up and the Rangers were able to carry out their jump. *U.S. Air Force*

On 1 April 1996, the 10th Weather Squadron was redesignated the 10th Combat Weather Squadron (10th CWS) at Fort Bragg, North Carolina. This one squadron is comprised of five detachments located within the United States and two separate overseas operating locations. Special Operations forces supported by the 10th CWS include U.S. Army Special Forces, U.S. Army Rangers, 160th Special Operations Aviation Regiment, special warfare training groups, and special operations support battalions. Assigned to AFSOC, the Special Operations weather technicians go through a limited version of the pipeline.

## *The Pipeline*

Whether an airman comes into the pipeline from U.S. Air Force Basic Military Training or volunteers from current Air Force Specialty Codes (AFSC), he will go through a selection process. Upon successful completion, the candidate will then follow a specific pipeline based on his choice of specialty. In the past both potential combat controllers and pararescuemen shared the same pipeline for core training, parting from the path to attend their specialty schools. Today, each of the battlefield airmen has a unique pipeline, though, at times, their paths may intertwine.

Battlefield airmen assigned to the 10th Combat Weather Squadron wear a grey beret. Shown here is their crest and beret flash. The three-colored stripes are representative of green for Army, purple for Joint Operations, and blue for Air Force.

## *Combat Controller Pipeline*

Combat control orientation—two weeks; Air Traffic Control School, Keelser AFB, Mississippi—sixteen weeks; U.S. Army Airborne School, Fort Benning, Georgia—three weeks; Survival School and Dunker training, Fairchild AFB, Washington—three weeks; Combat Control School, Pope AFB, North Carolina—twelve weeks; Advanced Skills Training, Hurlburt Field, Florida—fifty-two weeks; Military Free Fall School, Fort Bragg, North Carolina, and Yuma, Arizona—four weeks; and U.S. Air Force Combat Dive School, Panama City, Florida—six weeks.

## *Pararescue Pipeline*

Pararescue Indoctrination, Lackland AFB, Texas—twelve weeks; U.S. Air Force Combat Diver School, Panama City, Florida—six weeks; U.S. Army Airborne School, Fort Benning, Georgia—three weeks; Military Free Fall School, Fort Bragg, North Carolina, and Yuma, Arizona—four weeks; Survival School and Dunker training, Fairchild AFB, Washington—three weeks; Pararescue Medical Training, Kirtland AFB, New Mexico—twenty-two weeks; and Pararescue Rescue Training, Kirtland AFB, New Mexico—twenty weeks.

## *Special Operations Weatherman Pipeline*

Weather School, Kessler AFB, Mississippi—twenty-six weeks. Upon successful completion the airman is assigned to a conventional weather unit. After two years he can volunteer for Special Operations Weatherman training. If selected he continues the pipeline: U.S. Army Airborne School, Fort Benning, Georgia—three weeks; Survival School and Dunker training, Fairchild AFB, Washington—three weeks; and Advanced Skills Training (Phases 3 and 4), Hurlburt Field, Florida.

## *The Pipeline Core Schools*

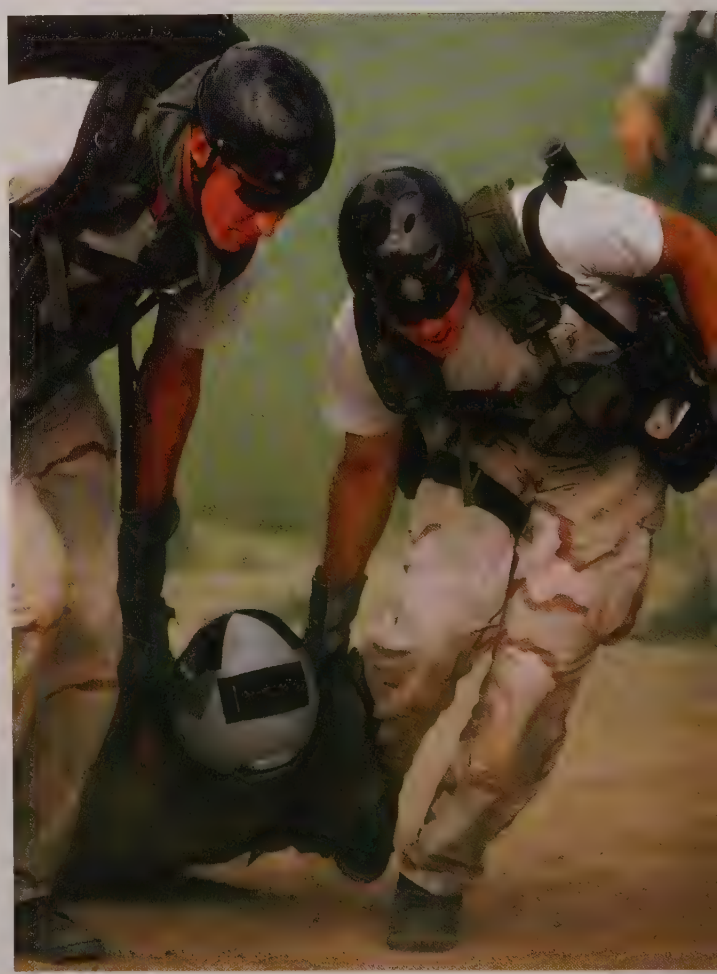
**U.S. Army Airborne School, Fort Benning, Georgia.** Here for the next three weeks trainees will be at the mercy of the U.S. Army's "Black Hats," the Airborne instructors of the 1st Battalion (Airborne), 507th Parachute Infantry Regiment, who will convert a "leg" into an "Airborne" trooper. They will

Staff Sgt. Matt Gross climbs forty feet up a caving ladder at the combat control school tower at Pope Air Force Base in North Carolina. Students raced up both sides of the tower carrying a minimum of forty pounds of equipment. Once deployed the combat controller will wish he only had forty pounds on his back. It is not uncommon for STS team members to carry in well over one hundred pounds of gear to prosecute their missions. *U.S. Air Force*

learn what it takes to hurl oneself out of a perfectly good airplane for the purpose of infiltrating into a mission drop zone.

Basic airborne training is broken into three weeks: Ground, Tower, and Jump Week. During Ground Week our trainees will start an intensive program of instruction designed to prepare the troopers to complete their parachute jumps. They will learn how to execute a flawless parachute landing fall (PLF) to land safely in the LZ. The PLF consists of five points of contact designed to absorb the shock of landing and distribute it across the (1) balls of the feet, (2) calf, (3) thigh, (4) buttocks, and (5) the push-up muscle of the back. They will learn the proper way to exit an aircraft using mock-ups of a C-130 and C-141. They will climb up a thirty-four-foot tower; here, they will be connected to the lateral drift apparatus (LDA) and upon command will assume door position and "Jump!" Proper body position will be evaluated, and they'll do it over and over until the "Black Hats" are happy; and they will run.

Next comes Tower Week. Now that our trainees have learned how to exit, position, and land, they will have this week to refine those skills. Using a training device known as the swing landing tower (SLT) where they are hooked up to a



**Above:** The Phoenix IR transmitter, weighing a mere two ounces, is a pocket-size user-programmable infrared (IR) beacon designed for personal combat identification (CID). Invisible to the naked eye, when observed with NVG it can be seen up to five miles away. A nine-volt battery, lightweight and easy to use, powers the transmitter. The Phoenix Jr. is a simple on/off strobe. The other unit contains two protruding pins allowing the unit to be programmed with a varying series of patterns.

**Left:** Seen here are two MS-2000(M) Strobe lights, which has replaced the SDU-5/E. This omni-directional white light is equivalent to 250,000 lumens. The light on the right has the IR (infrared) shield in place, which is visible only with NVGs. The unit on the left has the cover off. The strobe also features a blue filter, which differentiates the signal of the strobe from ground fire. The strobe is useful to facilitate CAS, PR, and other ground-to-air signaling. While common among all SOF units, CCT will carry a number of them to facilitate ground-to-air signaling.

**Below:** While STS teams are equipped with the latest high-tech equipment, the venerable smoke grenade also has its place in the rucksacks and assault vest of these elite troopers. It is not unusual to find a smoke grenade or two attached to an Air Commando's LBE or assault vest for signaling positions, or marking an HLZ for pickup. Seen here is an assortment of M18 colored smoke grenades in violet, yellow, and green (not shown but also available is red). The grenade produces a cloud of colored smoke for fifty to ninety seconds.

parachute harness, they jump from a twelve-foot-high elevated platform. The apparatus provides the downward motion and oscillation simulating that of an actual parachute jump. To make things more challenging for the student, the instructors have control of the SLT and can determine if they want to land hard or soft. As one student rushes toward the ground, hands clinging to the harness, the instructor yells, "Hazard left!" and leans into the rope controlling the drop. They watch as the airborne trainee hits the ground, and they better have landed in a manner to avoid the imaginary obstacle, or the "Airborne Sergeant" will have a few choice words and a number of push-ups, too. "Airborne!"

During week two the student gets to ride the "Tower." The Tower is designed to give the student practice in controlling the parachute during the decent from 250 feet and execute a PLF upon landing. They will learn how to handle parachute malfunctions, and they will run.

Armed with the GUU-5/P and M203 grenade launcher, this STT team leader provides cover as his team settles in for a regional survey. Note he is wearing three strobes: one pouch attached to his ALCIE pack strap, one secured to his LBE, and a third sewn to the sleeve of his BDU. No matter how much equipment he may have to dump, he will still be able to execute his mission, and if necessary, evade and escape (E&E) out of enemy territory.

Combat Controller Staff Sgt. Rick Driggers listens to the pilot of "Cowboy Zero-3," an incoming Pave Low that will provide CAS to his STS team. Driggers wears an integrated ballistic helmet. This helmet is being evaluated as a replacement for the Gentex helmets now in use. The IBH is a Kevlar helmet with communications gear attached to the headgear.

Finally, week three, Jump Week. The potential STS trooper will perform five parachute jumps. First, an individual jump with a T-10B. Next, a mass exit with equipment and T-10B chute. Then another individual exit with MC1-1B parachute and tactical assembly. The fourth jump will be a mass exit at night with T-10B and tactical equipment, and finally the fifth jump either an individual jump with an MV1-1B or mass jump with a T-10B parachute.

The U.S. Army's "Guide for Airborne Students" states, "Airborne training is a rite of passage for the warrior." Upon graduation they will be awarded the coveted silver wings and are now qualified as "Airborne" troopers.

**U.S. Army Military Freefall Parachutist School.** The mission of the school is to train personnel in the science of HALO, military free-fall parachuting, and using the Ram-Air Parachute System (RAPS). Military free-fall (MFF) parachuting enables the theater commander to infiltrate an STS team into an area that would prohibit the use of static-line parachute operations. Special operations missions require rapid and covert infiltration into operational areas.

During week one, the future STS members will go through the normal in-processing and be issued equipment. At this time they will be assigned to a HALO instructor who will remain with them throughout the four-week training

"PJ Forward!" Working together, a Ranger pitches in to assist the STS Pararescuemen as they tend to an injured crew member. The PJs of AFSOC are among the highest trained medical specialist in SOCOM. While their mission is to aid the injured, they are combatants and keep their weapons, a CAR-15 and MP5, close at hand.

cycle. It is also during week one that they will be matched up with a "jump buddy." Their buddy will be approximately the same weight and height so they will fall at the same rate.

In ground school they will learn about the ram-air parachutes, substantially different from the usual T-10B or MC1-1B that they jumped with at Basic Airborne School. The MC-5 ram-air parachutes are rectangular as opposed to circular. These parachutes are much more maneuverable. Repacking procedures as well as rigging the parachutes and equipment will be taught in this phase of training. At this time, special jump commands will be covered as well as the use of the oxygen systems used for high-altitude jumping.

Emergency procedures (EPs) such as parachute malfunctions, cut-aways, entanglements, and so on are taught, and so is how to recover from these mishaps. These exercises are run through over and over until they become second nature to the jumpers. Falling at a rate of more than one hundred eighty feet per second, you do not have the luxury of thinking about the problem, you must react.

While in week one, the candidate will spend time in the Military Free Fall Simulator Facility. Completed in 1992 at Fort Bragg, at a cost of $5 million, this eleven thousand-square-foot facility contains an enclosed, vertical wind tunnel, thirty-two-student classroom, operator control room, communications, and equipment rooms. "This facility is a marked improvement," relates Carol Darby of the Special Warfare School. "Prior to having the facility, the students had to practice [body stabilization] by lying on tabletops."

The simulator is approximately eighteen feet high and fourteen feet in diameter and can support two jumpers with equipment up to three hundred seventy five pounds. The simulator's fan generates winds up to one hundred thirty two miles per hour. Suspended in a column of air, the students will learn and practice body-stabilization techniques. The wind tunnel will simulate the effects of free falling at a speed of approximately two hundred feet per second.

With ground week completed, the students will travel to Yuma Proving Grounds, Arizona. Weeks two through five will find our candidates jumping, jumping, and jumping again, beginning at ten thousand feet with no equipment and working up to twenty-five thousand feet with full equipment load and oxygen system. The course provides in-the-air instruction where the students will concentrate on stability, aerial maneuvers, and parachute deployment procedures. Each student will receive a minimum of sixteen free-fall jumps; this will include two day and two night jumps with oxygen and full field equipment.

**U.S. Air Force Survival School** at Fairchild Air Force Base, Washington state, where the students will be the guests of the 336th Training Group. The mission of the school is

*"To prepare America's aircrew for global survivability anytime, anywhere, and return with honor."* It was to this training that U.S. Air Force Capt. Scott O'Grady credited his ability to survive on the ground after his F-16 was shot down in Bosnia.

Here in the mountains of Coville and Kanisksu national forests, approximately seventy miles north of Spokane, the cadre of the 22nd Training Squadron conducts the Combat Survival Training, basic survival techniques for remote areas. The course includes training in parachute landing falls (PLFs), life support equipment procedures, construction of a shelter, procurement of food, and its preparation. Additional survival skills will be taught, such as day and night land navigation, ground-to-air signaling, vectoring rescue aircraft to their location, and helicopter hoist training—procedures, principles, equipment, and techniques that will be needed to survive the harshness of climate and hostile environment, with minimal equipment.

Along with the survival methods, they are also given SERE (survival, escape, resistance, and evasion) training. These are methods in evasive travel, camouflage techniques, and resistance in captivity. During the SERE phase of training, students will participate in a field exercise where they will become familiar with captivity and interrogation. This training will challenge the future STS members physically, mentally, and emotionally. At the conclusion of the three weeks, they will have their debriefing and graduation.

**U.S. Air Force Combat Divers School.** At its location in Panama City, Florida, combat diver candidates learn to use SCUBA gear to stealthily infiltrate a target area. This training is essential to the STS teams since they are often tasked with supporting U.S. Navy SEALs and must be at home in the water, as are the frogmen.

Training will include waterborne operations both day and night. Students will be taught ocean subsurface navigation, deep diving techniques, marine hazards, and how to read tides, waves, and currents. It will be in Key West that they'll be instructed in the proper procedures of entering and exiting a submerged sub. Training in both open-circuit and closed-circuit equipment will be taught. This is not recreation diving as depths in training go down to one hundred thirty feet under diverse operating conditions.

This training phase will last six weeks. In the final week of training the students will perform an underwater compass swim. It is not sufficient to just know "how" to SCUBA dive, they must be able to execute a mission via underwater egress. Equipped with a compass board, SCUBA tank, weapon, and rucksack, they will carry out an infiltration to a point on the beach. The final week also brings more night dives, a field training exercise, and graduation.

**Combat Control Team (CCT) Orientation.** This two-week orientation course focuses on sports physiology, nutrition, basic exercises, combat control history, and fundamentals. During these two weeks the airman is introduced to the history of combat control, missions, and career field specific skills. Candidates are required to take part in a rigorous physical fitness program that introduces them to the type of physical training conducted during their journey through the pipeline. The course includes: running, swimming, calisthenics, weight training, team building skills, sports nutrition, sports medicine, and combat control academic and practical related skills.

**Air Traffic Control School.** Keesler Air Force Base, Mississippi, is where the core skill-set is attained for the potential combat controller. The candidate will be under the instruction of both civilian and U.S. Air Force air traffic controllers. This course teaches orientation into air traffic control and basic flight rules, VFR tower, radar approach control (RAPCON) procedures, aircraft recognition, aircraft performance, air navigational aids, weather, airport traffic control, flight assistance, communications, conventional approach control, and air traffic control. This is the meat and potatoes of the combat controller's task. Combat controller trainees also attend a five-day combat non-radar class. At the conclusion of this course they are prepared to take the Federal Aviation Administration's Control Tower Operator examination.

**Combat Control School.** Master Sgt. Paul Venturella, an instructor at the Combat Control School at Pope Air Force Base, North Carolina, relates the school's mission as, "To train United States Air Force and select joint and allied service personnel basic combat skills to support controlling air traffic in an austere combat airhead operation, [and] to provide specialized advance skills training to support

combat control team leader duties, static line Jumpmaster duties, and survey operations." For the next twelve weeks and three days the school's cadre will carry out this mission with their students. Class size varies; eleven trainees per class is the average, with an optimum of twenty. The course includes combat tactics, communication and navigational equipment, land navigation, assault zone operations, air traffic control, demolitions, and fire support, and concludes with a field training exercise.

As with all branches of the service, when you hit a new school or base you go through the in-processing. For the candidates arriving at the Combat Control School it is no different. Here they are checked out in various procedures, such as CPR (cardiopulmonary resuscitation). They are issued their equipment and, like their pararescue teammates, they receive the standard ALICE field pack, size large. Unlike the PJs' medical rucksack, Master Sergeant Venturella explains, "The thing about CCT is we do so many types of missions in many different manners and configurations that it's almost impossible to list a 'standard' load." The mission dictates what the CCT will pack, he continues. "I've been on numerous real-world and training missions with rucks that can weigh as little as thirty pounds and as much as one hundred and ten pounds."

If the mission was going to be primarily air traffic control, then the controller would carry the appropriate radio setup. Along with the radio he would carry the necessary antennas, accouterments, and extra batteries. If the team is going in to set up a runway or landing zone, they would distribute the equipment among the team. Some would carry the radios, while others would pack lights, batteries, recognition panels, and stakes to make the runway. In addition to this equipment, the CCT might include various types of electronic navigational aids, a light-gun, NVGs, or a weather kit. While certain missions do indeed determine the type of equipment, there are three items that I have never seen a CCT member without: a radio, a strobe with IR cover, and a weapon.

While at the CCT school, physical conditioning is continuously stressed. Physical training is conducted throughout the eighty-seven days of training. One day the student may be doing a six-mile run; the next day will find him performing pool work or weight training, with a rucksack march rounding out the week. This constant physical preparation ensures that future combat controllers will be up to the task, both physically and mentally for the course, field training exercise, and their assignment to a special tactics squadron.

The first two weeks of training is in tactics. In this block, the instructors impart their knowledge in small unit tactics. Students will become familiar with various weapons that will be carried on their missions. Methods of insertion from rappelling to fast roping will be taught. Team leader procedures, field hygiene, gas mask (NBC) methods, and field craft are all included in this block. At the end of the twelve weeks the students perform a tactical, static-line parachute jump for an overnight FTX that will apply the skills learned in this block.

The next block of training is communications/navigational

Combat controllers will utilize an assortment of navigational aids for air-traffic control. The VS-17 signal panel measures 72 inches by 19 inches and is colored international orange on one side and fluorescent pink on the other. Runway lights, red, green, blue, clear, and infrared can be controlled all from a small handheld device.

equipment. One of the most important tools employed by a CCT is his radio. Here the CCT will learn the practical applications that will be used in his assignment to an STS as a combat controller: radio equipment that allows ground-to-air and ground-to-ground communications; radios, such as the PRC-117F, that are useful to talk on all the radio nets (networks or frequencies), VHF, AM/FM, UHF AM/FM and SATCOM, except HF; portable radios; interteam radios; and radios mounted inside Humvees. Concurrently, communication security (COMSEC) and command and control communication will be covered in this block.

While communication is an essential tool of a CCT, it is not of much use if the aircraft has nowhere to land, or the helo has no LZ. In addition to the plethora of radio equipment, the students are exposed to a vast array of navigational aids and equipment. They will be taught how to employ the B-2 Light gun; how to set up a runway with as little as five lights, a technique known as "Box and One"; how to use cloth panel markers, known as VS-17 panels; and how to use strobes, normal issue with IR covers to small programmable units the size of nine-volt batteries. Instruction is given on how to set up landing lights, colored as well as IR. These lights can all be controlled from a small hand unit similar to a TV remote. A practical test using all the equipment is given at the end of the class.

This combat controller prepares to set up the SATCOM antennae for the PRC-117 radio. While he is getting the unit ready, other members of the team have formed a defensive perimeter and are providing security for the team.

There will be times when the CCTs jump in with the assault force. Other times they will have to jump in with other SOFs or perhaps on their own to perform an SR or RST. On these occasions they will use the information obtained in the land navigation block at the CCT school, starting off with the basics, practical work with a map and compass, and use of the military grid reference system (MGRS). Once comfortable with these methods, they move on to GPS procedures and point-to-point navigation. As with the previous blocks, it ends with a three-day FTX, to evaluate the student's land navigation skills.

In the assault zone block they will receive practical training in the basics of establishing a drop zone, landing zone, and helicopter landing zone (HLZ). Using visual aids, they will learn how to marshal aircraft once on the ground and perform limited weather observations and assault zone management. This culminates in the establishment of an assault zone and block test.

Upon hitting the ground, the CCT may be required to remove obstacles from the tarmac to allow follow-on forces to land uninhibited. For this reason, the students go through the demolitions block. For five days they will receive knowledge and practical instruction: how to safely employ nonelectric demolitions. *Nonelectric* is defined as a timed fuse method as opposed to command detonation. Demolition techniques will be taught, including the Saddle Charge, used to cut cylindrical, mild steel targets up to 8 inches in diameter; Diamond Charge, used to cut either mild or alloy cylindrical steel of any diameter; Ribbon Charge, used to cut noncylindrical steel (that is, I beams, angle irons, and so on) up to two inches thick; and others. This culminates in practical testing in the applications, calculations, and placement of explosives.

The last block of instruction at Pope Air Force Base is fire support for four days. In the communication block the student

learns how to use the radio as a tool. In this block he discovers how to transform the radio into a weapon called close air support, or CAS. Training consists of integrating CAS with ground- and sea-based weapons systems, night operations, laser procedures, mission execution, and how to call for fire interfacing with AC-130 gunships and helicopters for CAS. You only have to spend a few moments on Alpha 77 at Eglin Air Force Base to realize the awesome effect of CAS. As with the other blocks, it ends with practical evaluation of skills learned.

Now that our future combat controllers have been schooled in their trade, they are off to the Sand Hills of North Carolina, just west of Camp McKall, where the U.S. Army SF has its Q-course and SERE school. They will spend the next ten days in a comprehensive FTX applying all of the skills taught over the past twelve weeks. It begins with a mission plan, team leader brief, and equipment preparation. When they are "good to go" they will be inserted into their assigned area of operations (AO). After insertion, the students will receive various follow-on missions for the next eight days. They will be required to plan, prepare, and rehearse each mission prior to its execution. The FTX mission includes the establishment of numerous assault zones; FRIS insertion and HLZ; a run through the obstacle course (Q-course at SF Camp McKall); patrol base operations; movement of the team overland, perhaps an SR; practical exercise (equipment and procedures); and CAS knowledge employing lasing procedures using a laser designator referred to as the SOFLAM or Special Operations Force Laser Acquisition Marker. The final mission includes a border crossing back into friendly territory. On the final morning of the FTX is a 115-mile rucksack march from the field to the Combat Control School. Students are required to carry seventy pounds in their rucksack, LBE, and weapon.

Those airmen and officers completing this phase of training are qualified for assignment as combat controllers. Some will be assigned to conventional CCT in USAF Air Combat Command, while those entering AFSOC will be assigned to one of the four special tactics squadrons in the continental United States. It is at the end of this course that they are awarded the scarlet beret, with the U.S. Air Force Combat Control crest, "First There."

For the STS team member, this is just the beginning. They will go on to receive intense training in deploying the special air asset of AFSOC, including advanced training in working with "fast movers" for CAS and becoming Special Operations Tactical Air Control (SOTAC) qualified. They will undergo Ranger training and other "infantry-related" skills.

Combat controller Staff Sgt. Rick Driggers of the 720th STS maintains radio communications with orbiting MH-53E in preparation for a close air support mission. The other member of the STT carries an AN/PRC 117; multi-mission FM/AM, UHF TACSAT radio. *Staff Sgt. Rick Driggers*

Combat controllers are awarded the scarlet beret and the U.S. Air Force Combat Control crest, "First There." Upon graduation from the Pararescue School, the PJ is awarded the maroon beret with the Pararescue crest. Their motto, "That others may live," reaffirms the pararescueman's commitment to saving lives and self-sacrifice.

All of the training of the "pipeline" is essential to the success of the STS mission. It is not that they will be given the assignment to take an airfield; that would go to the Rangers. They would not be asked to fast rope onto a building and perform a hostage rescue; these operations are tasked to the SEALs or Delta Force. In each scenario, however, there will be air assets involved and possible casualties. The STS teams will be there to support such operations. This is the reason for the intensity of the "pipeline" and subsequent training. When a member of an STS team is attached to other SOF units, they must be an asset, not a liability. "The last thing you want to do is slow that SEAL team down," Master Sgt. Ron Childress (ret.) explains. "If you do . . . they will not call you in again."

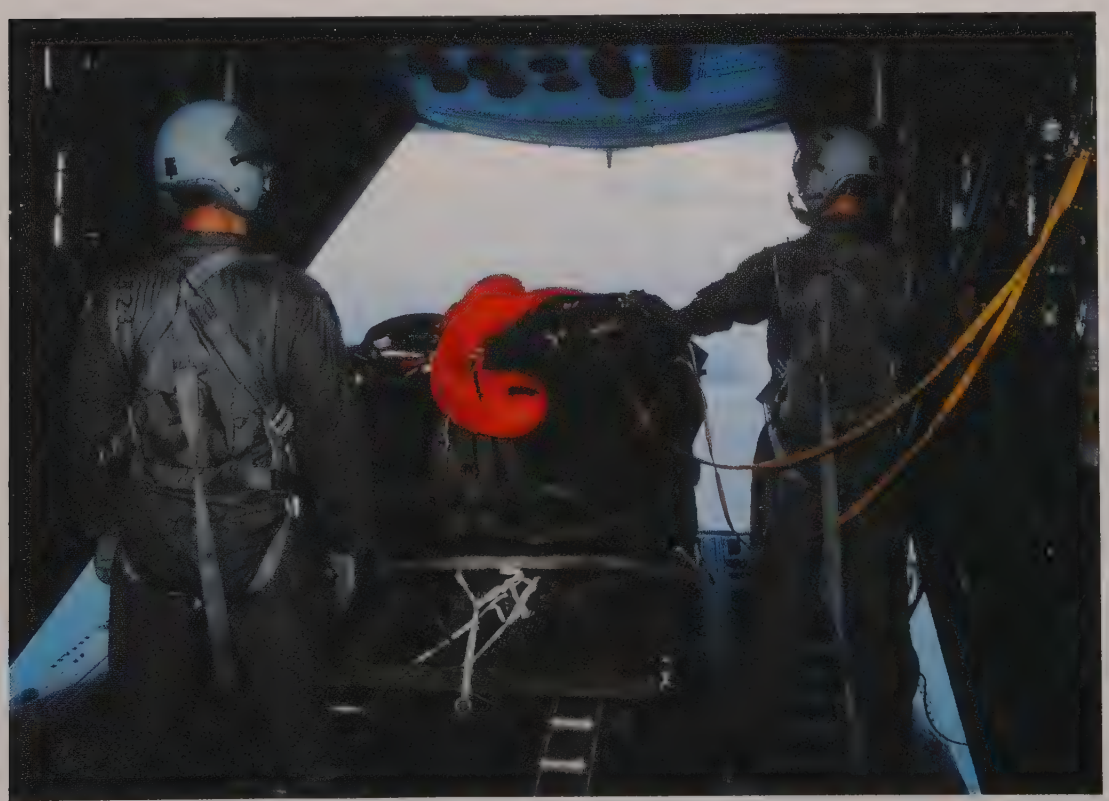
## *Advance Skills Training Course*

A decade ago combat controllers and pararescuemen went through initial familiarization (IFAM). IFAM was the gathering of PJs and CCT airmen into a cohesive unit where they are exposed to all the aspects, methods, and procedures carried out in STS operations. It was an exercise that would mold the airmen into the lethal force known as air commandos; it lasted one month.

During IFAM the PJs and CCTs, both "rookies" and experienced, would run through the paces of the "bread and butter" of STS. Ron Childress, a combat veteran CCT, related. "Here they [STS teams] find out exactly *what* we do and *how* we do it," Childress said. He and the IFAM cadre impart their knowledge, lessons learned, experience, and motivation into the up-and-coming teams that will take their place in the special tactics squadrons.

Today, those airmen going into special tactics team will attend the Advance Skills Training at Hurlburt Field, Florida. Depending on their specialty, they will add various phases of the course. The introduction of the course syllabus to the AST course reads, "Welcome to the Advanced Skills Training (AST) course, and the start of your training to become a Combat Ready special tactics Operator. AST Cadre are centered on excellence, committed to building and maintaining a consortium of joint and unilateral special operations training activities focused on the training of special operators."

The duration of the IFAM course was one month and trained approximately 14 students. In 2000 the training was tasked to decrease the time a three-level trainee would be in training to become a five level. The course has been expanded



On the ramp and ready to go, a rigged alternate method Zodiac (RAMZ) package is prepared to be deployed from a MC-130P Combat Shadow. Within seconds of the deflated Zodiac raft exiting the aircraft, the STT will follow it out. Once the team hits the water and has discarded their parachutes, they begin removing the Zodiac from the packing, inflating the raft, and getting the outboard engine, positioned, primed, and running. Once it is ready to go, they will load aboard and head for the insertion point.

to one year and encompasses all the core tasks in the combat control Career Field Education and Training Plan (CFETP), with an enrollment of more than one hundred twenty students a year. Emphasizing a hands-on approach to learning, the AST course offers the opportunity for combat control, pararescue, and combat weather trainees to interact and train in a joint team environment.

Advanced Skills Training provides the most opportune training for newly assigned special tactics operators. AST also provides STS operators the ability to become mission ready prior to joining individual STS teams. This schedule is broken down into four phases of training: Water, Ground, Employment, and Mission Qualification Training. Each of the four phases is designed to give the student the required skill to progress to the next phase. AST will push the trainee to the edge of the envelope with demanding physical as well as mental exercise. Success comes to those who are willing to give one hundred percent throughout each evolution.

## *Warriors Training Warriors*

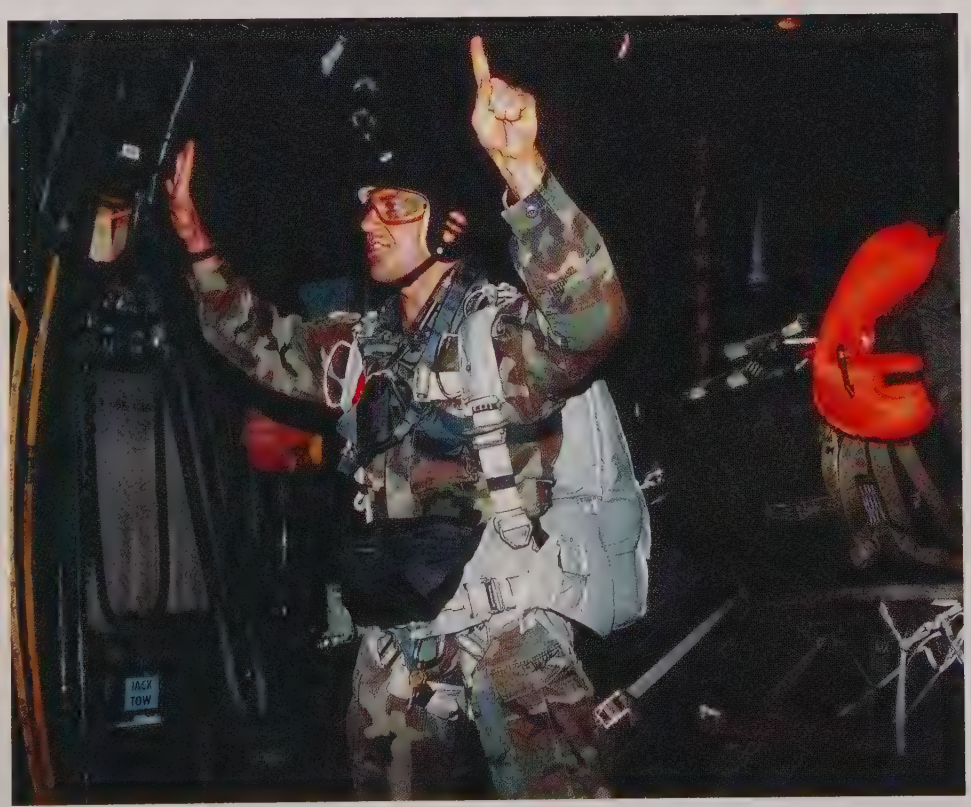
Using what is called the Mentoring Program, the cadre includes retired combat control senior non-commissioned officers who provide leadership, guidance, and continuity required to professionally develop and ensure the success of each student. Each of these NCO mentors brings a wealth of combat experience and extensive educational background in real-world combat controller and special tactics missions.

## *Phase I—Water*

The mission of the water phase is to prepare special tactics operators for the Combat Diver Qualification Course (CDQC) and prepare them for the stress of waterborne operations normally encountered in the field. Students participate in extensive physical conditioning with emphasis on swimming, running, and calisthenics. This phase prepares them for the rigors of training and the demands of a battlefield airman. The first two weeks involve base and squadron in-processing. Academic training includes: dive physics, decompression dives, dive tables, dangerous marine life, and terminology. Completion of pre-SCUBA is their "ticket" to attend SCUBA School and earn the SCUBA badge. It is at the CDQC where the operator will become a combat diver and learn to use SCUBA covertly to infiltrate areas surrounded by water.

## *Phase II—Ground*

This phase is conducted at Hurlburt Field, Florida, and Fort Bragg, North Carolina, as well as other locations. During the ninety-day Ground phase, the students will learn numerous skills that are essential to carry out their missions at combat controllers. The course syllabus describes this phase, "You will



With the four turbo-prop engines running, it is rather noisy inside of the Combat Shadow. Communications is thereby conveyed in the form of hand signals. Here, the jumpmaster for the RAMZ drop, Staff Sgt. Rick Driggers, holds up six fingers, indicating that the team is six minutes away from the insertion point. The cargo ramp will be opened and seven minutes from now the STT will be in the air.

accomplish the majority of Career Field Training Program objectives in this phase to include: command and control, Air Traffic Control, fixed and rotary wing call for fire [CFF] training, portable and vehicular communications, and demolitions. Additionally, you will become familiar with survey techniques, including AUTOCAD and global positioning systems [GPS]. You will become well versed in assault zone procedures, including actual drop zone [DZ] and landing zone [LZ] assault training missions at various locations around the continental United States."

## *Phase III—Employment*

This phase is conducted at Hurlburt Field for a duration of ninety days. Students will be exposed to various infiltration methods of employment used by special tactics operators that include: Static line and Military Free Fall Airborne operations. Alternate insertion/extraction methods with helicopters to include fast-rope, rappel, rope ladder, and hoist operations.

During this phase students also learn military dive operations that include compass and search dive procedures. Small boat operations include preparation for employment; capsize drills, intercostals, riverine, and navigation. Small unit tactics skills are sharpened with weapons, dismounted patrols, and tactical vehicle operations. As in the other two previous phases of instruction, PT will consist of full battle dress uniform, LBE, weapon, swimming, running, ruck marches, trail runs, and an obstacle course.

Capt. Frankie Rodriquez provides some "motivational" mentoring to a 2nd Lieutenant during Advance Skills Training. The captain is a master in the art of war and a veteran of multiple incursions into enemy territory in support of OEF. He, as well as other members of the cadre, is more than capable of providing the students with the necessary guidance to facilitate their evolution into battlefield airmen. *U.S. Air Force*

## *Phase IV—Mission Qualification Training*

The shortest phase of AST is the MQT coming in at seventy days. Here students learn the skills regarding mission planning, including various types of orders, planning considerations, ST Intel support capabilities, and use of Falcon View mission planning software. They will use this planning process during every full mission profile (FMP).

The students receive a mission frag order and plan and prepare for a three-day FMP. The profiles will include a Helo Soft-Duck insertion, overland movement, target recon, and exfiltration to friendly lines. Students develop recall procedures and assume an alert posture with a thirty-minute response time.

These future battlefield airmen will travel to Sandrock, Alabama, where they learn military mountaineering techniques to include: basic securing/hauling systems, stokes litter, single man pick-offs, rappelling, bouldering, and rock-climbing skills.

Students also receive classes on the history, purpose, and detailed planning consideration required to successfully execute a full-blown airfield seizure. They will be taught how to build bike-bundle packages and conduct a day Jump Clearing Team operation. In addition to the day work, they will perform a night airfield seizure; FMP is conducted, including more than a half dozen fixed and rotary wing aircraft at OLF Choctaw, Florida, or Tonopah Test Range, Nevada. The exercise is followed by a detailed aircrew/instructor debrief.

## *Graduation*

Upon completing all four phases of AST, graduating the Combat Diver Course, Military Free Fall Parachutist Course, and passing the two Career Development Courses, the operators are now ready to become a combat control journeyman. Their mission will be as a highly trained weapon system and force multiplier, ready to deploy.

## *Pararescue Indoctrination Course*

The journey for a slot at a PJ in the special tactics squadrons begins in the hot Texas sun, near San Antonio, at Lackland Air Force Base. For twelve grueling weeks potential team members go through the Pararescue Indoctrination Course. Here, the volunteers show whether they have what it takes to enter into the highly selective, extremely aggressive, and high-risk world of Air Force Special Operations.

The Indoc course selects, screens, and trains the potential PJs for their specialty field. The candidate is at the threshold of a year's journey through some of the military's most intensive training. Indoctrination is designed to push the students mentally and physically to their limits and beyond. This training prepares them for the high standards they will be expected to meet as they make their way through the pipeline and their ultimate assignment—combat. During Indoc the instructors will place the students in highly stressful situations that will challenge their mental capabilities, their physical qualities, and most important, their determination and perseverance to stick it out until the job is done. There is no room in STS or any other SOF unit for an individual who wants to quit when things get rough. Students who graduate from the Indoctrination Course will have developed the skills that should prevent them from failure in the pipeline if they give and maintain one hundred percent dedication.

For the next twelve weeks the candidates will hone themselves to a mental and physical razor's edge. Run training consists of long, slow distances, sprints, interval training, and others. The pace for evaluation is a seven-minute mile. Weight training programs are included to develop strength, endurance, and speed. Interspersed between these activities comes calisthenics, assorted, at the judgment of the instructors.

In week three the trainees experience "Motivation Week" or "Hell Week"—actually, three days, but it seems like a week, and one that is never going to end. One moment our trainees are resting in their bunks and the next moment they are belly down, face in the dirt, crawling under barbed wire through the obstacle course. The exercise goes on nonstop: no sleep, pushing the envelope of their inner strength. Motivation Week separates the overwhelmed from the serious operators. Hell Week cuts the class size; it is not unheard of that out of a class of eighty, nine volunteers graduate.

From day one and throughout IC, the candidates will find themselves in the water. Here the candidates are subjected to water confidence and swim training. This is the same training that the officer students were exposed to in Phase II. At indoctrination, the enlisted get their feet wet, literally, as they learn underwater swimming; fin swimming; mask and snorkel recovery; buddy breathing/pool harassment; bobbing; underwater knots; ditch and donning equipment; treading water; weight belt swim; and the ever-popular drownproofing. For the officer trainees, they get to appreciate this course a second time; practice does make perfect!

The course also will concentrate on marksmanship training (M-16A1 rifle and M-9 pistol), physiological training (altitude and dive chambers), as well as academic instruction in dive physics and metric measurements. Upon graduation from this selection process, the airmen and officers now have their ticket to ride the pipeline, and they will move on to numerous military specialty schools.

## *Pararescue School*

PJ Medical training and Rescue training is conducted at Kirtland Air Force Base, New Mexico.

**Emergency Medical Technician Basic and Paramedic Courses:** The Emergency Medical Training consists of the EMT-Basic and EMT-Paramedic Courses running concurrently for all enlisted pipeline students. All students must successfully complete all portions of the EMT-B course, before entering the EMT-P course. All students MUST successfully complete each program and obtain National Registry certification prior to attending the PJ Apprentice course.

**EMT-Basic Training:** The course is twenty-three days, one hundred eighty-seven hours in duration. The performance and didactic portions comply with the Department of Transportations National Standard Curriculum. The course curriculum provides basic knowledge and skills in emergency, pre-hospital care necessary for entrance into the EMT-P course. The program teaches: Anatomy and Physiology with

cadaver lab at UNM, Assessment/Care of the Trauma patient, Assessment/Care of the Medical Patient, Assessment/Care of the Pediatric patient, Assessment/Care of the Geriatric patient, HAZMAT, and Identification and treatment of Environmental injuries.

**EMT-Paramedic Training:** The course is a one hundred seventeen days, one thousand, two hundred hours in duration. The performance and didactic portions comply with the Department of Transportation's National Standard Curriculum. Course curriculum builds on and reinforces the basic knowledge/skills previously learned in EMT-B while focusing on advanced emergency procedures and techniques. The program focuses on advanced airway management, advanced shock management/intravenous therapy, pharmacology/medication administration, cardiology, pre-hospital trauma life support, advanced cardiac life support, pediatric advanced life support, advanced surgical skills/suturing, mass casualty/triage, and diseases of military importance. The program also requires students to complete a six-week clinical/field training. Students are assigned to medical treatment facilities and emergency medical pre-hospital care agencies. Students MUST successfully complete this phase of training and obtain the recommendation from their clinical preceptor in order to test for National Registry certification.

Upon graduation of the Medical training, the candidate is certified as an Emergency Medical Technician-Paramedic. Having received their certification as an EMT-P they continue to the PJ rescue training. The Pararescue Recovery Specialist Course, the final course, which is uniquely tailored for pararescuemen, is divided into three phases: ground, air, and medical.

The future PJ receives quite extensive training and with good reason. A U.S. Army medic in the Rangers, for example, is schooled in advanced combat medicine. He is fully capable of providing first aid treatment to his company during a mission. The medical specialists on a U.S. Army Special Forces A-team are also highly trained. According to Carol Darby of the USASOC PAO, "Some SF medical sergeants who obtain the MOS of 18D can be as qualified as many physician assistants, maybe more." Although capable of providing combat medicine, their missions more often revolve around organizing medical care in civic actions, humanitarian operations, preventative medicine, and care of the A-team members and indigenous guerrilla forces in unconventional warfare operations.

For pararescuemen assigned to AFSOC, though capable, their mission is not to perform fundamental first aid or civic actions. Special tactics squadron PJs do not have the comfort of working out of an aid station or having a Black Hawk sitting 10 yards away leisurely waiting for them. They have to get to the casualty, evaluate, stabilize, and extract, most likely while under hostile fire. Air Force Special Operations PJs are proficient medical specialists who are fully trained as dive medics and excel in the science of trauma medicine.

The U.S. Air Force major commands have determined what qualifications pararescuemen must possess for assignment to their commands. Air Combat Command looks for an emergency medical technician-intermediate, while Air Force Special Operations Command requires its personnel to obtain the emergency medical technician-paramedic qualification. Medical training at Kirtland is specially designed to meet the U.S. Air Force requirements. Drive-along programs are included in the training regime. The PJs will accompany emergency rescue ambulance crews in various major cities. They will see the lacerations and punctures created by knife wounds, the blast and cavitations from gun shots, and fractures and crushing wounds found in vehicular accidents; in other words, trauma medicine.

### *Ground Phase*

The student will be taught fieldcraft, firecraft, woodcraft, and accelerated survival techniques. Although the probability is rare, a PJ may be placed in a survival situation, on his own or with a wounded individual, perhaps a downed pilot. Trainees will learn how to live "off the land." Instruction will be given in identifying edible plants and how to obtain and prepare food from various wilderness sources. Master Stg. Rick Weaver, an instructor at the Pararescue School, explains, "They [the students] have learned how to survive during the U.S. Air Force survival course. Now we want to see what they've learned. How do you start a fire? Show me how you get water from a pine branch by placing a plastic bag over it and squeezing off the moisture."

There may be times, for whatever reasons, that a PJ may be stuck on the ground alone. For this reason, PJs are taught field operations and tactics at Kirtland. They are instructed in how to evade capture in enemy territory and how to survive. This exercise is a point-to-point movement; the student must locate and extract a casualty. While doing so, the school's cadre will be out looking for those in the field. The difference between this and the survival school is the evasion and escape exercises are not as intense at Kirtland. The cadre does not hunt you down and take you prisoner. It is designed to instill a confident outlook and positive attitude, to accept the circumstances, and "drive-on" at all cost.

Part of the ground phase includes lessons in navigation. Each candidate is required to be proficient in daylight or nighttime navigation. He must know the basics of geography, how to read a map and navigate from one, and how to use a compass, a pace counter, and altimeter to determine his exact location. "The primary method of navigation," outlined by Master Sgt. Weaver, "are the stars, lensatic compass, any compass, and a map. They must learn the basics." The global positioning system is taught, but it is used as a secondary method. However, as Weaver depicts, ". . . If you use it [GPS] all the time it will become a crutch." There are times when batteries go dead or the unit is not available. The student is expected to accomplish these skills in the darkest night with and without the aid of night-vision goggles (NVGs). The trainee will be evaluated on his navigational prowess during a ten-day navigational exercise in a mountainous environment; well suited for such an exercise is the Manzano Mountains just south of Albuquerque, New Mexico.

While on the subject of mountains, the students will learn how to traverse, climb over, and rappel down a mountain. This may be done alone or with a casualty. During this phase of training they will become familiar with various mountaineering equipment, such as carabiners, chokes, ice axes, and so on. They will learn to tie more knots than a Boy Scout and how to work with ropes to build rope bridges. From belaying techniques to mountain walking, the trainees will become one with the mountain. Since mountains, as the sea, are unforgiving, it is this training that will result in a successful rescue, or the loss of a survivor and perhaps the rescue team.

The mountaineering instruction begins with "The Tower," a climbing and abseiling, or rappelling, structure forty feet high. Here the students are given ample time to practice their climbing skills. The tower is arrayed with various "rocks" that lead to the top of it. This simulates climbing the mountain. The student must accomplish this task without the aid of sophisticated commercial mountaineering equipment. Once the climbing skills are accomplished, the instructors break out the latest "high-speed" climbing equipment for the trainees to learn. One might ask, why not bring out all this high-tech climbing gear right from the start? It is like learning long division; first you must know the basics, then you learn the short cuts. Pararescuemen have to accomplish their mission. Sometimes that includes using the latest mountaineering gear; other times, it means using their hands, arms, legs, and brains to complete the rescue.

As the trainees learn that what goes up must come down, they will learn the proper techniques in rappelling. How to rappel down the side of a mountain with a 90-pound rucksack or how to abseil down the side of a cliff with a wounded pilot in a stokes litter. They will also learn how to belay another climber down the face of the mountain.

Upon completion of the classroom work and the practicing on the tower, the candidates head out to the Pecos Mountains. Here for the next ten days they will carry out field and mountain operations. Upon arrival to the base of the mountain, they will establish a base camp from where operations will be carried out. There, instructors will give them further training in fieldcraft and land search.

For the next four mornings they will head to the mountain for actual practice on the rocks. They rehearse basic rock climbing, ascending, rappelling, litter evacuations, river crossing, and improvised mountaineering setups. On the final day the instructors will evaluate all the trainees on every aspect of mountaineering. Students must pass all of these evaluations before they are allowed to continue the field training exercise.

The next five days of the operation will find the trainees practicing navigation and adverse terrain movement techniques as they traverse the mountain in planned routes. They will move from location to location and must become proficient in

establishing their coordinates on a map. Students are required to ascertain their position within 50 meters at any time. This is to be done without the aid of a GPS unit. As the future PJs move along they will have more opportunities to practice fieldcraft skills. They will set up a camp, build a fire, forage for food, and be tasked with exercises ranging from building a rope bridge to treating a simulated casualty—all under the watchful eyes of their instructors. At the end of these five days they will be evaluated; those who pass move on to the next phase of training—Tactics.

STS teams, like other Special Operations forces, often operate in small groups, so they must learn small unit tactics. During the pararescue course this subject will be infused into the skills of the PJ. They will learn how to operate as a small team under extreme conditions. In addition, they will learn how to interface with other operators, such as SEALs, Rangers, Special Forces, and Special Air Service forces for quick integration.

While in this phase of training the students will be run through various scenarios and exercises planned by their instructors with an emphasis on night operations. A test of the small team unit integrity will come when the students face their instructors operating as an "OpForce." Will the team hold together, or will they break and run? You cannot have a quitter in a special tactics squadron.

Ninety percent of the training mission will be performed at night. Some will use night-vision goggles or devices extensively, while others will not. The trainees must learn how to operate with and without the aid of high-tech gear. This will teach them the benefits as well as the limitations of each scenario. Students are also instructed in the tactics of a nuclear, biological, and chemical (NBC) battlefield environment.

At the end of the Tactics phase of training, the candidates are sent on a three- to five-day tactical mission. This mission will test their skills in reaching their objective, perhaps a survivor, treating the casualty, preparing them to be moved, and evacuation.

All trainees will become familiar with various types of signaling and communications. They will learn how to improvise signals such as creating a signal out of wood or cloth panels. They will also receive training with the more sophisticated survival and long-range radios. Communications is one of the most essential tools in the PJs' selection of mission equipment.

### *Medical Phase*

Individuals in the PJ career path are issued the standard all-purpose light individual carrying equipment (ALICE) field pack, size large. This is the same ruck found among SF A-teams, Rangers, and fellow CCTs; the difference is that the PJ's ruck is replete with medical supplies. It's filled to the brim with a first aid kit, space blanket, surgical kit, tracheotomy kit, bandaging, IV infusor kit, diagnostic kit, poleless litter, assorted splints, stethoscope, medications, and so on. Each PJ's medical rucksack is arranged exactly the same, in the event a PJ would have to work out of another team member's pack. For example, the lower three large pockets on

A pararescue sergeant administers an IV to a wounded team member. Pararescuemen, also known as parajumpers (PJs), are highly trained in dealing with the numerous types of injuries they may encounter. They are also trained in the latest methods of trauma medicine. From simple procedures to the treatment of gunshot wounds the pararescuemen are tops in their fields.

the outside of the rucksack are designated A, B, and C for *airway, bleeding,* and *circulation.* If any member of the team requires a battle dressing, he would know to go directly to the B, or lower, middle pocket. Other specialized medical equipment may be issued or transported with the STS team, dictated by mission parameters.

Team members will learn how to set up and properly wear their LBE (load-bearing equipment) and ALICE packs. It will not be uncommon for the medical rucks to weigh ninety or more pounds and the LBE to carry more than twenty pounds of gear. They will learn how to pack this gear and carry it as comfortably as possible. The PJs must learn how to move efficiently and stealthily under their load. They will have to learn how to navigate through an aircraft fuselage as well as through a wooded terrain or mountain slope.

Students will learn techniques and procedures on the use of the rapid extraction deployment system (REDS). Similar to the "jaws of life" found on fire trucks around the country, the REDS is used to cut away an aircraft fuselage to extricate a casualty. The REDS kit will contain a generator, combo tool, axes, reciprocal saw, and other necessary hardware to aid in the removal of the injured personnel. Students will also learn how to rig the REDS for fast rope.

A pararescueman uses the rapid extrication device system (REDS) on a downed helicopter to aid in the extraction of the pilot from the aircraft. Similar to the "jaws-of-life" carried by various fire departments, this equipment can cut and chew its way through metal, wires, and airframe to get to a crew member.

While at Kirtland, the class will be taught how to conduct an actual search, from beginning the mission planning and implementation to the complete rescue and exfiltration. Using the information from their class, they will form into a rescue team, determine how to set up a base camp, and execute the mission of locating, treating, and evacuating a survivor.

## *Air Phase*

The final phase of the Pararescue and Recovery Course is Air Operations. Here, the trainees will become familiar with aircraft and aircrew knowledge: how to perform an aerial search pattern, emergency procedures, and various aircraft systems operations. The trainees will be taught alternate insertion/extraction (AIE) methods. Helicopter techniques such as rope ladders, hoists, rappelling, and fast roping (from thirty to one hundred twenty feet) are all taught in this segment of training. The students will also learn how to helocast from helicopters. This entails deploying into the water from an altitude of approximately ten feet at a rough speed of ten knots.

Advanced parachuting techniques are taught in this phase. Students will learn how to waterproof and rig their equipment with SCUBA tanks. Pararescuemen will be introduced to the "tree suit," officially called the parachutist rough terrain system (PRTS). This is a specially manufactured suit having extra padding to protect the neck, armpits, kidneys, elbows, crotch, and knees of the jumper. It was designed for the purpose of jumping into heavily wooded environments and has a large pocket to stow up to fifty feet of rope to facilitate lowering the jumper to the ground should the parachutist get hung up in a tree. Each trainee will make ten land jumps, two tree jumps, and five SCUBA jumps, totaling seventeen, of which four to six will be night jumps.

Upon completion of this course, the qualified airman is ready for assignment to any pararescue unit worldwide. Those who complete the pararescue training are awarded the maroon beret and wear the U.S. Air Force crest, "That Others May Live."

Chapter 7

# SPECIAL OPERATIONS TECHNIQUES

There are times when a team cannot just drop into an enemy's backyard, for political reasons, or strategic or tactical considerations. You must insert your team clandestinely from afar and outside of the nation's territorial airspace or boundaries. For such an insertion a U.S. Special Operations team would use either high altitude low opening (HALO) or high altitude high opening (HAHO). Both of these methods are common among U.S. Navy SEALs and Army Special Forces A-teams. For that reason, the AFSOC STS teams will also learn and become proficient in performing these procedures alongside their U.S. Army and Navy SOF operators.

These types of parachute operations will be flights over or adjacent to the objective area from altitudes not normally associated with conventional static-line parachuting. HALO/HAHO infiltrations are normally conducted under the cover of darkness or at twilight to lessen the chance of observation by hostile forces. Using the RAPS, the STS teams deploy their parachutes at a designated altitude, assemble in the air, and land together in the arranged drop zone to begin their mission. This type of drop can be conducted even in adverse weather conditions.

Flying at an altitude of twenty-five thousand to forty-three thousand feet MSL (mean sea level), a Combat Talon will appear as legitimate aircraft on an enemy's radar screen, perhaps just another commercial airliner traversing the globe. What the radar operator will not know is that the aircraft is the launching platform for the world's most lethal system, a detachment of highly trained U.S. Army Special Forces, "shooters" with their assigned STS team attached.

Military free fall operations (MFF) are ideally adapted for the infiltration of STS and SOF personnel. While the maximum exit altitude is forty-three thousand feet MSL, MFF operations may be as low as five thousand feet above ground level (AGL). A typical STS team can be deployed in the fraction of the time it would take a conventional static-line jump. Normal opening altitudes range from three thousand, five hundred AGL to twenty-five thousand MSL, depending on mission parameters.

As the AFSOC pilots approach the insertion point, the ramp of the MC-130H will lower. With the combination of aircraft noise and wearing the MFF parachutist helmet and oxygen mask, any type of verbal communication is almost impossible. For this reason the team will communicate with arm-and-hand signals. Having already received the signals to don helmets, unfasten seat belts, and check oxygen, the jumpmaster waits for the team to signal back "OK." Further instruction will be given to the jumpers as to wind speed and any gusting, all using silent signaling.

Approximately two minutes before the insertion, the jumpmaster raises his arm upward from his side indicating the team should "stand up." Next he extends his arm straight out at shoulder level, palm up, then bends it to touch his helmet, this indicating "move to the rear." The special tactics team members, equipped with ram-air parachutes, oxygen masks, and goggles, stand up and get ready to jump. If jumping from the side jump door, he'll be a meter away; if going out the rear of the plane, the lead man will stop at the hinge of the cargo ramp. With their rucksacks filled with mission-essential equipment, they waddle toward the rear of the plane.

**Left:** An STS combat controller fast ropes out of an MH-53E. For this trip his team will exit the starboard door of the helicopter. The "fast rope" may also be attached in the rear of the aircraft and the special operations troops would exit off the rear cargo ramp. The proper procedure is to swing out so your rucksack does not get caught on the airframe and hang you up. This CCT member is properly positioned and on his way to a fast slide to the ground. Carrying an AN/PRC 117 radio he will be ready to set up for close air support upon hitting the ground. Once the team has completed the "fast rope," the Pave Low gunner will release the latch and the heavy woolen rope drops to the ground. Depending on the mission parameters, the rope may be dropped or may be dragged back into the helicopter so no telltale signs are left of the STT insertion.

Moments turn into an eternity, and then it is time; as the aircraft reaches the proper coordinates for the drop, the jump light emits a steady green. The command is given, "Go!" In a matter of seconds the team of Air Commandos, looking like a giant centipede, shuffles down the ramp and out into the darkness as the drone of the plane's engines fades off in the distance.

Depending on the mission parameters, they will perform a HALO or HAHO jump. In HALO, the team will exit the plan and free fall through the airspace, meeting up at a prearranged time or altitude. Jumping in this manner, the team is so small that they are virtually invisible and, of course, will not show up on any enemy radar screen. Using GPS units and altimeters, the team will descend until fairly close to the drop zone. At that point they will open their chutes and prepare for the very short trip to the ground.

The alternate method HAHO is also jumping from an extreme height with oxygen. The difference is that as soon as the team jumps off, they immediately deploy their parachutes and use them to glide into a denied area. For this type of jump, they would also use GPS units and altimeters. To maintain formation integrity, each jumper would have a strobe on his helmet, either normal or IR, and the team would wear the appropriate NVGs. Additionally, each team member would be on interteam radio for command and control of the insertion, as well as formation on the DZ.

The fast rope is made from eight stands of nylon synthetic line, which is designed to facilitate the insertion of personnel from a hovering helicopter. The rope is approximately two inches in diameter providing ease of handling, a sure grip, and a minimum stretch. The rope comes in fifty- to one-hundred-twenty-foot lengths, allowing the special tactics teams to insert onto various structures and environments. Also shown here is a pair of standard issue rappelling gloves (tan) and a pair of HellStorm heavy-duty fast rope gloves (black) from Black Hawk Industries. The gloves incorporate a heat barrier palm pad to protect the wearers as they insert. The glove also has a quick release wrist cinch and a carabineer loop to attach the gloves to an assault vest or LBE.

There are a number of advantages of using the HALO/HAHO procedures. There are times when the presence of enemy air defenses makes it best to infiltrate a team into a hostile area. This also increases the survivability of the support aircraft. If the mission requires the team to jump into a mountainous terrain where it would not be practical or prudent to attempt a static-line parachute operation, MFF would be a practical option. Other benefits include times when navigational aids (NAVAIDS) are not available to guarantee the requisite precision of drops at low altitudes (i.e., deserts or jungle environments), or when it is deemed necessary to land the team at multiple points of an objective for the purpose of attacking or seizing a primary target and the mission success requires a low-signature infiltration.

## *FRIS*

The fast rope insertion system (FRIS) is the new way to get your assault force on the ground in seconds. This system begins with small, woven wool ropes that are braided into a larger rope. The rope is rolled into a deployment bag and the end is secured to the helicopter. Depending on the model of chopper, it can be just outside on the hoist mechanism or attached to a bracket off the back ramp. Once over the insertion point the rope is deployed, and even as it is hitting the ground the STS team members are jumping onto it and sliding down, as easily as a firefighter goes down a pole. Once the team is safely on the ground, the gunner or flight engineer on the helicopter will pull the safety pin, and the rope will fall to the ground. Such a system is extremely useful in the rapid deployment of special tactics squadrons personnel, as well as the other Special Operations forces that have mastered the technique. Unlike rappelling, once the trooper hits the ground, he is "free" of the rope and can begin his mission.

## *SPIES*

While fast roping gets you down quick, there are times when you have to get out of Dodge just as fast. The problem is, there is no LZ for the MH-53E Pave Low to land, and the bad guys are closing in on your position. This technique began during the Vietnam War as the McGuire rig, then it was modified to the STABO rig. Both used multiple ropes, which often resulted in the troops colliding into one another; the latter at least had the benefit of allowing the user to use his weapon while on the ride up. What served the Special Forces troops of the 1960s has been refined to the new special procedure insertion extraction system (SPIES) method.

While the technique has changed, the methodology remains. A *single* rope is lowered from the hovering helicopter. Attached to this rope are rings, woven and secured into the rope at approximately five-foot intervals. There can be as many as eight rings on the rope. The STS team members, wearing special harnesses similar to parachute harnesses, will attach themselves to the rope, via the rings. This is accomplished by clipping in a snap link that is at the top of the harness.

Once all team members are secured, a signal is given and the STS team becomes airborne in reverse and extracted out of harm's way. While tried and tested, this method allows the team to maintain covering fire from their weapons as they extract.

Once the STS team has been rushed out of enemy range and an LZ can be located, the helicopter pilot will bring the troops to ground again. At this time they will disconnect from the rope and board the chopper, which will then finish the extraction.

SPIES is not without risks, as the pilot of the helicopter must take care not to drag the commandos through the trees or other permanent ground fixtures, such as rocks, mountain sides, or buildings. The AFSOC helicopter pilots are remarkably proficient at seeing this does not happen.

## *Rappelling*

With fast rope insertion system (FRIS) being the most accepted way of getting a force onto the ground expeditiously, there are still occasions when STS teams will use rappelling to accomplish their mission. There are times when working in a mountainous terrain, or in an urban environment, that this technique will come in handy.

Attaching regular military-issue rope through carabiners, or a specially designed rappelling device (known as a "Figure 8"), the team will negotiate down the side of a

mountain to reach a downed pilot or establish an observation point for SR.

This old mountaineering technique has served Special Forces troops for decades and is still a viable asset in the inventory of skills of the special tactics squadrons.

## *Rubber Duck*

A "rubber duck" is the term SOF troops will use to describe a mission where there is a need to deploy a Zodiac raft. There are numerous methods of conveying the craft to the water, and the AFSOC aircrews and STS teams are specialists at all of them.

There is the "soft duck." Here, the fully inflated Zodiac raft is deployed from the rear cargo ramp of an MH-53 Pave Low or an MH-47 Chinook. The raft is slid out of the helicopter and the STT follows right behind. Once in the water, the team jumps in, fires up the outboard engine, and heads out on the mission. An alternate to this is the *hard duck*; this is a craft with a metal bottom, and it is delivered in the same manner as the soft duck.

Another method of deployment is the K duck; the "k" stands for "kangaroo." As the name implies, the Zodiac raft is slung underneath a Pave Hawk. It is fully inflated and mission ready upon hitting the water. Rounding out the alphabet ducks is the "t duck"; the "t" stands for "tether." In this case the raft is totally deflated, rolled up, and secured inside the helicopter. Once deployed, as before, the team will inflate, load up, and begin its mission.

Two fully inflated Zodiac rafts are palletized, rigged, and await loading onto an AFSOC aircraft. Among the load will be the engines that will be set in place once they hit the water and have been separated. The STT will then enter the raft and begin their over-water insertion.

Moving from the rotary to the fixed-wing methods, there is the *RAMZ* drop. Pronounced "rams," it is defined as a rigging alternate method–Zodiac. Originally designed by the PJs for NASA shuttle missions, the Zodiac raft is fully deflated and secured to a disposable pallet; parachutes are then attached to the harness, securing the package. Moments after the loadmaster releases the package, the STS troops will shuffle to the end of the ramp and parachute in after it. A variation of the deflated method is the *double duck*, where two Zodiacs, fully inflated, are stacked and deployed via parachute together. Both the RAMZ and Double would be delivered by a Combat Talon or Combat Shadow.

The STS members are capable of inserting by land, air, and in this case, sea. This scout swimmer of the STT arrives on the beach; he'll pause at the water's edge. Keeping his rifle up and ready, he will survey the surroundings and bring the rest of the team up on his signal.

Chapter 8

# WEAPONS AND EQUIPMENT

## *Pistols*

In 1985, the U.S. military adopted the Beretta Model 92F 9mm semiautomatic pistol as the standard-issue sidearm for U.S. troops Along with the standardization of the 9mm, the M9 brought the armed forces a larger-capacity magazine. The M9 holds fifteen rounds compared to the Colt 1911's seven or eight rounds. Although the 9mm ammunition was lighter and smaller, it was viewed that this was adequate for line troops. This trade-off also allowed the troops to engage more rounds in a firefight before needing to reload.

The M9 features a rotating firing pin system with decocking and trigger bar disconnect. A magazine release is positioned at the base of the trigger guard, accommodating either left-handed or right-handed shooters. The slide is open for nearly the entire length of the barrel. This facilitates the ejection of spent shells and virtually eliminates stoppages. The open slide configuration also provides a means for the pistol to be loaded manually.

As with all weapons in use with Special Operations forces, the operators are always trying to get that extra edge. One of the most likely features to be added to the M9 was a sound suppressor. For such a device the military turned to Knight Armament Company to produce the needed suppressor. The smooth, cylindrical suppressor is made of anodized aluminum with a steel attachment system. Weighing a scant 6 ounces, it can be replaced or removed in three seconds. Carrying over the Vietnam-era name, the suppressor was dubbed the "Hush-Puppy."

## *Joint SOF Combat Pistol Program*

While the U.S. military may have switched to the M9 Beretta, it was never accepted nor adopted by the door-kickers as a serious weapon, especially for counter terrorism and hostage rescue missions. The Joint SOF Combat Pistol program is being conducted by SOCOM to evaluate the future handgun for U.S. SOF units—caliber 45! Currently in the preliminary stages of development, the program will be examining the offerings of several manufacturers. Among the weapons being considered by SOCOM is the HK45 manufactured by Heckler & Koch.

The HK45 is based on their universal self-loading pistol. Following the USP design, the HK45 has ambidextrous slide and magazine releases. The polygonal barrel and linkless operating system are housed in a steel slide that is mated to a polymer frame. Depending on the operator's preference, the weapon can be configured for single action (SA), double action (DA), or double action only (DAO). To accommodate various users, the hand-grip features interchangeable backstraps. Molded into the frame is a Mil Std 1913 rail permitting the attachment of lasers, lights, etc. The HK45 comes in two models; the full size HK45 and the compact HK45C. Both of the handguns can be fitted with threaded barrels to facilitate the attachment of a suppressor. While other companies are being considered, the HK45 certainly looks like the pick of the litter.

Stealth and secrecy can best be maintained with the help of a suppressed weapon. Here, a combat controller uses a M9 Beretta fitted with a suppressor.

**Left:** The M9 is a lightweight, semiautomatic pistol manufactured by Beretta, which replaced the 1911A1 in the mid-eighties as the standard issue sidearm. It can be fired as either a double- or single-action and is chambered for 9mm NATO ammunition. The weapon is lighter than the 1911 and carries almost twice the ammunition, fifteen rounds versus eight. The ammunition is in a double-stack format, which does make the grip of the pistol wider than the 1911.

## *HK Submachine Guns*

### MP5

Although U.S. Special Operations forces have transitioned to the M4A1 carbine as their primary weapon, you can still find the German-made Heckler & Koch MP5 sub-machine gun in their armories. There are operators in the community who believe the MP5 still has a viable place in CT, CQB, and personal protection operations. One special tactics officer comments, "...(T)he MP5 still has its place; the SD model is especially useful in sentry removal." The MP5 family of submachine guns is simple to handle as well as fast and accurate, whether firing from the shoulder or the hip.

The U.S. military has finally come to the table and realized the .45 caliber pistol is "the" caliber of choice for real-world operations. One of the top competitors for the replacement of the venerable 1911 is Heckler and Koch. Seen here are four versions of the proposed CPS. Starting clockwise from the upper left is the HK45, HK45 tactical, the HK45 compact tactical with suppressor, and the HK45 compact with magazine extension. As this book goes to print the SOF pistol program has been placed on hold. However, as GWOT continues, it is very likely these pistols will find their way into the hands of operators down range. *Heckler and Koch photo*

The MP5 employs the same delayed blowback operated roller-locked bolt system found in the proven HK G3 automatic rifle. All the characteristics of HK, reliability, ease of handling, simple maintenance, and safety, are accentuated on the MP5. Firing from the closed-bolt position during all modes of fire makes MP5 submachine guns extremely accurate and controllable. Its high accuracy results form the fixed barrel, which is cold forged together with the cartridge chamber. The recoil of the MP5 is extremely smooth allowing the shooter to obtain highly accurate shot placement. It fires a 9mm Parabellum pistol round usually carried in a thirty-round magazine, and is often equipped with a dual magazine holder. An operator with an MP5 can be very effective when encountering a terrorist in a hostage situation or when engaging other mission critical targets.

Common throughout each of the MP5 series of weapons is the capability to use various interchangeable assemblies and components. This provides the ability for operators to train with one weapon group and have them competent with the entire weapon system. The series also includes an accessory claw-lock scope mount and telescopic sight. HK scope mounts as wells as others, such as ARMS mounts, attach to the weapons without any special tools at special points that ensure one hundred percent return to zero.

### MP5N

The MP5N was developed by HK especially for the U.S. Navy SEALs. The MP5 "Navy" model comes standard with an ambidextrous trigger group and threaded barrel. The MP5-N fires from a closed and locked bolt in either the semiautomatic or automatic modes. This sub-gun is recoil operated and has a

There is nothing that has the feel of a Heckler and Koch MP5, 9mm submachine gun. Once the weapon of choice for many Special Operations forces and the preferred weapon for close quarters battle (CQB), it has all but been replaced by the M4A1 carbine. Nevertheless, you can still find the submachine gun "Down Range" in service with SOCOM units. As a member of the blue team of the 720th STS stated, "HK—the easy way out!"

unique delayed roller locked bolt system, a retractable butt stock, a removable suppressor, and illuminating flashlight integral to the forward hand guard. The flashlight is operated by a pressure switch custom fitted to the pistol grip. The basic configuration of this weapon makes for an ideal size, weight, and capable close quarters battle weapon system.

## MP5SD

For missions where stealth and secrecy is paramount, requiring fully integrated sound and flash suppression, the operators may turn to the HK MP5SD models. The model type, SD comes from the German term for "sound dampened" or Schalldampfer. The removable sound suppressor is integrated into the MP5's design and measures up to the normal length and profile of a standard, unsuppressed submachine gun. The

There are times when you need to enter with only a whisper. For those occasions, the STT will utilize the MP5-SD3. This is the same type of submachine gun as the MP5, but is fitted with an integral sound suppressor. The most noise comes from the action of the bolt as it chambers and ejects 9mm rounds.

An STT CSAR team poses with their aircraft during OIF. Each operator is equipped with a version of the Colt M4A1, which they have personalized with various accessories from the Special Operations peculiar modification (SOPMOD) accessory kit. The M4A1 features a collapsible stock, a flat top upper receiver with an accessory rail, and a detachable handle/rear aperture sight assembly. The rail interface system, or RIS, allows the attachment of numerous aiming devices and accessories depending on the mission. A variety of accessories include the EOTech HDS and Aimpoint Comp-ML optical sights and AN/PEQ-2. Attached to three of the weapons is a quick attach/detach (QAD) sound suppressor. With the suppressor attached the muzzle blast, flash, and sound are significantly reduced. *U.S. Air Force*

This combat control has mounted the Trijicon ACOG advanced combat optical gunsight atop his M4A1. The ACOG is a four power telescopic sight including a ballistic compensating reticle. Utilizing this reticle provides increased capability to direct, identify, and hit a target to the maximum effective range of the M4A1 carbine out to six hundred meters. Attached to the RIS are SOPMOD items, including a Surefire Millennium M900A vertical foregrip weapon light, an AN/PEQ-2, and attached to the barrel the QD suppressor. Additionally, the weapon has been fitted with the Crane stock, and a MagpulTM on the 30-round magazine. *U.S. Air Force*

A combat controller operating in Afghanistan during Operation Enduring Freedom. He wears a Blackhawk strike vest with an assortment of pouches and pockets. He is armed with an M4A1 with an Aimpoint Comp-M sight. The sight superimposes a red dot on the target, which the brain sees, allowing the soldier to adjust his weapon accordingly when required in the fast-paced shooting environment of CBQ. The Comp-M is parallax free, which means the shooter does not have to compensate for parallax deviation. *U.S. Air Force*

MP5SD uses an integral aluminum or optional wet technology stainless steel sound suppressor. It does not require use of subsonic ammunition for effective sound reduction as do most conventional sound suppressed submachine guns. The MP5SD3 has an S-E-F trigger group and the MP5SD6 has a three-round burst group.

### M4A1 carbine

The Colt M4A1 carbine is the standard issue weapon for special tactics teams. The M4A1 is a smaller, compact version of the full-sized M16A2 rifle. The main deference between the standard M4 and the M4A1 is the fire selector for the M4 can be selected for semi or three-round burst, while the M4A1 has a fire selection for semi- and full-automatic operation. The M4A1 is designed for speed of action and lightweight requirements as is often the case for the battlefield airman. The barrel has been redesigned to a shortened 14.5 inches, which reduces the weight, while maintaining its effectiveness for quick handling field operations. The retractable butt stock has four intermediate stops allowing versatility in CQB without compromising shooting capabilities. The M4A1 has a rifling twist of one in seven inches making it compatible with the full range of 5.56mm ammunitions. Its sighting system contains dual apertures, allowing for zero to two hundred meters and a smaller opening for engaging targets at a longer range of five hundred to six hundred meters.

### *Special Operations Peculiar Modification (SOPMOD) Accessory Kit*

U.S. Special Operations forces wanted to make the M4A1 carbine even more effective, whether close-in engagements or long-range targets. To accomplish this USSOCOM and Crane Division, Naval Surface Warfare Center, developed the

Special Operations peculiar modification (SOPMOD) accessory kit. Introduced in 1994, the SOPMOD kit is issued to all U.S. Special Operations forces to expand on the capabilities and operation of the M4A1 carbine.

The SOPMOD kit consists of numerous components that may be attached directly on the M4A1 carbine or attached to the rail interface system (RIS). The various accessories give the operator the flexibility to choose the appropriate, optics, lasers, lights, etc., dependent on mission parameters. The SOPMOD kit is constantly being evaluated and research is ongoing to further enhance the operability, functionality, and lethality of the M4A1 carbine. Currently, the kit is in Block 1 of a three-phase upgrade and modification program. STS battlefield airmen will also utilize other military and commercially off the shelf (COTS) modifications to enhance the M4A1 and the SOPMOD kit dependent on mission parameters, as seen in the embedded additions to the accessories below.

## *Rail Interface System (RIS)*

The rail interface system (RIS) is a notched rail system, which replaces the front hand guards on the M4A1 receiver. This rail system is located on the top, bottom, and sides of the barrel, and facilitates the attaching of SOPMOD kit components on any of the four sides. The notches are numbered making it possible to attach, and re-attached the various components at the same position each time it is mounted. Optical sights and night-vision devices can be mounted on the top, while top and side rails would be the choice for positioning laser-aiming devices or lights. The bottom of the RIS normally will accommodate the vertical grip and/or lights. When no accessories are mounted to the RIS, plastic hand guards are emplaced to provide cover and protect the unused portions of the rail.

## *ACOG (Advance Combat Optical Gunsight)*

The ACOG manufactured by Trijicon is the day optical scope for the SOPMOD kit. The ACOG is a four power telescopic sight including a ballistic compensating reticle. Utilizing this reticle provides increased capability to direct, identify, and hit target to the maximum effective range of the M4A1 carbine (six hundred meters). As a backup, the ACOG is equipped

The EOTech SU-231/PEQ holographic display sight (HDS) uses the same technology as is found in the heads up display, or HUD, on the F-117 aircraft. As the name implies, it displays holographic patterns, which have been designed for instant target acquisition under any lighting situations, without covering or obscuring the point of aim. The holographic reticle can be seen through the sight providing the operator with a large view of the target or zone of engagement. Using both eyes open the operator sights in on the target for a true two-eye operation.

The heads up, rectangular, full view of the SU-231/PEQ HDS eliminates any blind spots, constricted vision, or tunnel vision normally associated with cylindrical sights. The HDS is passive and gives off no signature, which could be seen by opposing units using NVGs. Having ten NV settings, the reticle will not "bloom" when viewed through night vision equipment. When used in conjunction with the AN/PVS-14 night vision device, it provides the operator with an outstanding view of the target area, and immediate target acquisition even in the darkest of environments.

with an iron sight for rapid close range engagement (CRE). Both the front iron sight and the scope reticle provide target recognition and stand-off attack advantage while retaining a close quarter capability equivalent to the standard iron sights.

## *Aimpoint Comp-M*

After extensive testing, the U.S. Army adopted the Aimpoint Comp-M as its red dot sighting system. Using a both eyes open and heads up method, the shooter is able to acquire the target with excellent speed and accuracy. The Comp-M sight superimposes a red dot on the target, which the brain sees, allowing the soldier to adjust his weapon accordingly when required in the fast-pace shooting environment of CBQ. The Comp-M is parallax free, which means the shooter does not have to compensate for parallax deviation. The sight may be mounted on the carrying handle or RIS of the M4A1.

## *SU-231/PEQ*

The SU-231/PEQ is part of the subprogram of the SOP-MOD kit. Manufactured by EOTech, the holographic display sight, as the name implies, displays holographic patterns, which have been designed for instant target acquisition under any lighting situations, without covering or obscuring the point of aim. The holographic reticle can be seen through

The AN/PEQ-2 infrared target pointer/illuminator/aiming laser (ITPIAL) incorporates lessons learned from Desert Storm and other combat operations.

AN/PVS-14 is the optimum night-vision monocular for special applications. It can be used handheld, on a facemask, helmet mounted, or attached to the RIS/RAS of a weapon. The AN/PVS-14 manufactured by ITT offers the latest, state-of-the-art capability in a package that meets the rigorous demands of Special Operations forces. By using the monocular configuration, the user can operate with night vision, while maintaining night vision in the opposite eye.

the sight providing the operator with a large view of the target or zone of engagement. Unlike other optics, the SU-231/PEQ is passive and gives off no telltale signature. The heads up, rectangular, full view of the HDS eliminates any blind spots, constricted vision, or tunnel vision normally associated with cylindrical sights. Using both eyes open the operator sights in on the target for a true two-eye operation.

The wide field of view of the SU-231/PEQ allows the operator to sight in on the target/target area while maintaining peripheral viewing through the sight if needed, up to thirty five off axis. A unique feature of the HDS is the fact it works if the heads-up display window is obstructed by mud, snow, etc. Even if the laminated window is shattered, the sight remains fully operational, with the point of aim/impact being maintained. Since many of special tactics teams' missions favor the night, it can be used in conjunction with NVG/NVD. The hallmarks of the HDS are speed and ease of use equating incredible accuracy and instant sight on target operation, which can be the difference between life and death in CQB operations.

## *Night Vision*

### AN/PVS-14

The AN/PVS-14D is the optimum night-vision monocular ensemble for special applications. The monocular or pocketscope can be handheld, on a facemask, helmet mounted, or attached to a weapon. The new PVS-14D night-vision monocular offers the latest, state-of-the-art capability in a package that meets the rigorous demands of the U.S. military's Special Operations forces. The monocular configuration is important to shooters who want to operate with night vision, while maintaining dark adaptation in the opposite eye. The headmount assembly, a standard in the kit, facilitates hands-free operation, when helmet wear is not required. The weapon mount allows for use in a variety of applications from using your iron sights to coupling with a red dot or tritium sighting system such as the Aimpoint Comp M/ML, Trijicon ACOG system, and EOTech HDS. A compass is available to allow the user to view the bearing in the night-vision image.

### AN/PVS-17

The AN/PVS-17 is a lightweight, compact, night-vision sight that provides the operator the capability to locate, identify, and engage targets from twenty to three hundred meters. The MNVS features a wide field-of-view, magnified night-vision image, illuminated reticle, adjustable for windage/elevation. It can be handheld or mounted on the weapon.

### AN/PEQ-2 infrared target pointer/ illuminator/ aiming laser (ITPIAL)

The AN/PEQ-2 infrared target pointer/illuminator/aiming laser (ITPIAL) allows the M4A1 to be effectively employed to three hundred meters with standard-issue night-vision goggles (NVGs) or a weapon-mounted night-vision device.

The quick attach/detach sound suppressor kit Mk4 MOD0 (QAD Suppressor) can quickly be emplaced or removed from the M4A1 carbine. With the suppressor in place, the report of the weapon is reduced by a minimum of 28 dB. The suppressor also reduces muzzle flash and blast substantially. This M4A1 is also equipped with the Surefire Millennium M900A vertical foregrip weapon light. *U.S. Air Force*

The IR illuminator broadens the capabilities of the NVGs in buildings, tunnels, jungle, overcast, and other low-light conditions, where starlight would not be sufficient to support night vision and allows visibility in areas normally in shadow. At close range, a neutral density filter is used to eliminate flare around the aiming laser for improving the view of the target, for identification, as well as precision aiming. This combination provides the operator a decisive advantage over an opposing force with little or no night-vision capability.

### *Forward Handgrip*

The forward or vertical handgrip attaches to the bottom of the RIS and provides added support giving the operator a more stable firing platform. It can be used as a monopod in a supported position and allows the operator to hold the weapon despite overheating. The forward handgrip can be used to push against the assault sling and stabilize the weapon with isometric tension during CQB/CRE. Using the handgrip brings the shooter's elbows in closer or tighter to his body consequently keeping the weapon in front of the operator. The handle allows quicker handling when the additional components have been attached to the weapon, thus providing more precise target acquisition.

The M203 grenade launcher is a lightweight, single-shot breech-loaded 40mm weapon specifically designed for placement beneath the barrel of the M4A1 carbine. With a quick-release mechanism, the addition of the M203 to M4A1 carbine creates the versatility of a weapon system capable of firing both 5.56mm ammunition as well as an expansive range of 40mm high-explosive and special-purpose munitions. *U.S. Air Force*

Having numerous modifications available it tends to make the solider want to use them all; it is not uncommon to see an operator with as many of the SOPMOD accessories on the M4A1 as he can fit. One operator commented on the use of the vertical grip, "One of the drawbacks of the vertical grip, often called the 'broom handle' is possibility of it catching on a ledge or edge of the helicopter during entry or extraction." This issue is being addressed by the evaluation of a quick release lever on the forward grip.

### *Crane Stock*

A new modification to the M4A1 carbine is the addition of a redesigned collapsible stock. The stock was designed by the Crane Division of the Naval Surface Warfare Center (NSWC), Crane, Indiana, and is referred to as the M14 stock, or simply the crane stock. The new stock affords the operator with a larger surface giving him a better position for placing his cheek. This "spot weld" provides the user with a more comfortable and stabile firing position than the current tubular design. The wider stock also features storage on both sides, which will accommodate extra batteries for such items as NVGs, flashlights, GPS, etc.

### *Quick Attach Suppressor*

The quick attach/detach sound suppressor kit Mk4 MOD0 (QAD suppressor) can quickly be emplaced or removed from the M4A1 carbine. With the suppressor in place, the report of the weapon is reduced by a minimum of 28 decibels (dB). As the 5.56mm round is supersonic, you will hear an audible crack of the round as it exits the barrel, but it is more like a .22 caliber pistol than a 5.56mm round. With the suppressor attached, it buys some time, while the bad guys are trying to figure out what was that? Where did it come from? By the time they figure out what is going on, the assault team should be in control of the situation. The suppressor will also keep the muzzle blast to a minimum, assisting the entry team in

The SCAR-H will replace the MK11 and the M14/enhanced battle rifle. Both SCAR models feature three interchangeable variable length barrels: CQC, standard, and sniper variant. This allows the special tactics squadron team member to fine-tune his weapon base on mission parameters. *FNH USA Photo*

situation awareness. While the suppressor does not completely eliminate the sound, it does reduce the firing signature (i.e., the flash and muzzle blasts). Using the suppressor is effective as a deceptive measure interfering with the enemy's ability to locate the shooter and take immediate action. Additionally, it reduces the need for hearing protection during CQB/CRE engagements thus improving inter-team voice communication.

## *Back-up Iron Sight (BUIS)*

The back-up iron sight (BUIS) supplies aiming ability similar to the standard iron sight on the carbine to three hundred meters. The BUIS folds out of the way to allow the day optical scope or reflex sight and night-vision device to be mounted on the M4A1 carbine. In the event the optical scopes are damaged or otherwise rendered inoperable, they can be removed and the BIS will then be used to complete the mission. The sight can also be used to bore sight or confirm zero on the reflex sight or visible laser.

## *M203 Grenade Launcher*

The quick attach/detach M203 mount and leaf sight when combined with the standard M203 grenade launcher provides additional firepower to the operator giving him both a point and area engagement capability. The most commonly utilized ammunition is the M406 40mm projectile, which includes high-explosive, dual-purpose ammunition; this grenade has a deadly radius of five meters, and it used as anti-personnel and anti-light armor. The quick-attach M203 combines flexibility and lethality to the individual weapon, utilizing multiple M203 setups, allowing concentrated fire by bursting munitions. These munitions are extremely useful in raids and ambushes or the ability to illuminate or obscure the target along with simultaneously delivering continuous HEDP fire. The M203 grenade leaf sight attaches to the rail interface system for fire control.

The receiver of the M203 is manufactured of high strength forged aluminum alloy. This provides extreme

When the mission calls for quietly reaching out and touching someone, the MK 11 has the ability to mount a sound suppresser. The muzzle blast becomes negligible and the only sound here is the sonic crack of the round going down range. The Mark 11 Mod 0 Type Rifle System 7.62mm is manufactured by Knight Manufacturing Company in Florida, it is a highly accurate, precision semi-automatic sniper rifle chamber capable of delivering its 7.62mm round well out to one thousand yards. This MK11 Mod 0 is equipped with a Leupold Long Range Tactical 3.5-10X 40mm Scope. *Knight Manufacturing Company*

ruggedness, while keeping weight to a minimum. A complete self-cocking firing mechanism, including striker, trigger, and positive safety lever, is included in the receiver. This will allow the M203 to be operated as an independent weapon, even though attached to the M16A1, M16A2 rifles, and M4A1 carbine. The barrel is also made of high strength aluminum alloy, which has been shortened from twelve to nine inches, allowing improved balance and handling. It slides forward in the receiver to accept a round of ammunition then slides backward to automatically lock in the closed position, ready to fire.

Carrying out their missions in small teams, special tactics teams depend on rapid deployment, mobility, and increased firepower; where the emphasis is focused on "get in and get out" fast, the addition of the M203 brings the added firepower to the M4A1 carbine.

### *Special Operations Forces Combat Assault Rifle (SCAR)*

Currently, the special tactics teams are using the M4A1 carbine; however, plans are in place to fully update the teams to the Special Operations forces combat assault rifle (SCAR), to be fielded by 2009. The SCAR is a modular assault rifle designed from the ground up with input from U.S. Special Operations forces. Designed by FN Herstal (FNH) Group headquartered in Liege, Belgium; the SCAR will be manufactured at the FN Manufacturing LLC plant in Columbia, South Carolina.

The SCAR system includes the SCAR-L (light) 5.56mm, SCAR-H (heavy) 7.62mm rifle, version and enhanced grenade launcher module (EGLM), which will be able to fire air burst munitions, as well as standard 40mm, high-explosive, dual-purpose ammunition. There is a ninety percent commonality between the two SCAR versions. The SCAR-L and SCAR-H utilize all of the accessories of the SOPMOD kit; (i.e., sights, lasers, scopes, etc.). To accommodate the assortment of SOPMOD accessories, the SCAR has multiple Picatiny (MIL-STD 1913) rails at 3-6-9-12 o'clock positions providing the operators with multiple configurations.

The SCAR-L will replace the MK18 CQBR (ten-inch SOPMOD upper), standard M4A1 carbine, and the MK12 SPR. The SCAR-H will replace the MK11 and the M14/enhanced battle rifle. Both SCAR models feature three interchangeable variable length barrels; for CQC, standard and sniper variant. This allows the special tactics squadron team member to fine-tune his weapon base on mission parameters.

The SCAR weapons employ a short stroke gas piston system eliminating the gas direct system of the M16/M4 family. This provides a more reliable weapon that does not heat up the rail system. The butt-stock features a folding telescoping stock as well as check height adjustment. This allows the operator to set the proper eye alignment to the assortment of SOPMOD optics.

To complement the SCAR is the enhanced grenade launcher module (EGLM), which replaces the M203 grenade launcher. The 40mm EGLM features a left- or right-hand side opening breech to facilitate the loading of longer munitions. The EGLM includes a 40mm weapon module, Fired Control Unit I (mechanical with integrated laser/MRD sight) and a standalone stock.

### *MK11*

The MK11 Mod 0 type rifle system 7.62mm, manufactured by Knight Manufacturing Company in Florida, is a highly accurate, precision semi-automatic sniper rifle chamber capable of delivering its 7.62mm round well out to one thousand yards. With a half-inch MOA accuracy, the MK11 has won acceptance in the SOF community as one of the finest semi-automatic sniper rifles in the world. The MK11 is based on the original SR-25; this rifle appears to be an M16 on steroids. In fact sixty percent of the parts are common with the M16 family.

M249 Squad Assault Weapon is an individually portable, air-cooled, belt-fed, gas-operated, light machinegun. The standard ammunition load is two hundred rounds of 5.56mm ammunition in disintegrating belts. These rounds are fed from a two hundred–round plastic ammunition box and fed through the side of the weapon. Utilizing the same 5.56mm ammunition as the M4A1, it allows the ODA to carry common ammunition loads. The M249 is capable of engaging targets out to eight hundred meters. The STS teams will soon be fielding the MK46, which is a modified version of the SAW. *U.S. Air Force*

The M240B is the replacement for the aging M60 machinegun. The highly reliable 7.62mm machine gun delivers more energy to the target than the smaller caliber M249 squad assault weapon (SAW). The machinegun seen here is a M240B mounted on a M1114 ground mobility vehicle. To augment battlefield airmen's range and lethality, they will be adding the MK48 to their inventory, which is a modified version of the M240 weapon. *U.S. Air Force*

If an operator is familiar with the M16 or M4A1, his hands will naturally fall in place on the MK11. From the pistol grip, to the safety switch or magazine release, if you've handled an M16 you already know how to operate the MK11. The result of this replication is a rifle that is quicker to assimilate, easy to maintain, and seamless in transition than any other semi-automatic 7.62mm rifle in the world.

Similar to the M4A1, the MK11 has two main sections; the upper and lower receiver. This allows for cleaning in the same manner that the troops have been familiar with since basic training. Another benefit of the receiver's breakdown is the fact that the rifle may be transported in a smaller package for clandestine activities. Once on target, the rifle is merely reassembled with no effect on the zero of the optics.

The MK11 Mod 0 system includes free floating twenty-inch barrel, and a free-floating rail adapter system (RAS). The RAS is similar to the RIS on the M4A1. Another feature of the MK11 is the ability to mount a sound suppresser. The muzzle blast becomes negligible and the only sound here is the sonic crack of the round going down range.

## *M249 Squad Automatic Weapon (SAW)*

Fielded in the mid-eighties, the M249 SAW is an individually portable, air-cooled, belt-fed, gas-operated, light machinegun. A unique feature of the SAW is the number of alternate ammunition feeds. The standard ammunition load is two hundred rounds of 5.56mm ammunition in disintegrating belts. These rounds are fed from a two hundred–round plastic ammunition box and feed through the side of the weapon. The normal link ammunition for the SAW is four rounds of M855 ball ammunitions followed by one round of M85 tracer. Additionally, it can utilize standard twenty- and thirty-round M16 magazines, which are inserted in a magazine well in the bottom of the SAW. Utilizing the same 5.56mm ammunition as the M4A1, it allows the ODA to carry common ammunition loads. The M249 is capable of engaging targets out to eight hundred meters. Currently, the M249 in use with special tactics teams is fitted with a full stock and not with a sliding stock as used in the para-saw configuration.

The STS teams will soon be fielding the MK 46 MOD 0 light machine gun, which is a modified version of the M249 Saw. The MK46 is upgraded with the rail attachment system, allowing the attachment of SOPMOD kit accessories. The MK46 is an air-cooled, belt-fed, gas-operated automatic weapon that fires from the open-bolt position. It has a cyclic rate of 750 rounds per minute and can be fitted with a standard thirty-round M4A1 magazine or a 200-round box magazine.

## *M240B Medium Machine Gun*

After extensive operational testing, the M240 medium machine gun was selected as a replacement for the M60 family of machine guns. Manufactured by Fabrique Nationale the 24.2-pound M240 medium machinegun is a gas-operated, air-cooled, linked belt-fed weapon that fires the 7.62x51mm

The Mark 47 advanced lightweight grenade launcher is a self-powered, air-cooled, belt-fed, blow-back operated weapon. The MK47 is designed to deliver accurate, intense, and decisive firepower against enemy personnel and lightly armored vehicle. It uses standard belt-fed 40mm ammunition in either M430 high-explosive, dual-purpose (HEDP) or the MK285 air bursting ammunition. *U.S. Air Force*

round. The weapon fires from an open bolt position with a maximum effective range of eleven hundred meters. The rate of fire is adjustable from seven hundred fifty to one thousand, four hundred rounds per minute through an adjustable gas regulator. It features a folding bipod that attaches to the receiver, a quick-change barrel assembly, a feed cover and bolt assembly enabling closure of the cover regardless of bolt position, a plastic butt stock, and an integral optical sight rail. While it possessed many of the same characteristics as the older M60, the durability of the M240 system results in superior reliability and maintainability.

The special tactics teams are transitioning to the customized MK48 Light machinegun that allows for the attachment of SOP mod accessories (e.g., optical sights, night-vision devices, laser designators, IR aiming devices, flashlights, and a forward pistol grip or bi-pod).

## *AT4*

The M136 AT4 is the U.S. Army's principal light anti-tank weapon providing precision delivery of an 84mm, high-explosive, anti-armor warhead, with negligible recoil. The M136 AT4 is a man-portable, self-contained, anti-armor weapon consisting of a free-flight, fin-stabilized, rocket-type cartridge packed in an expendable, one-piece, fiberglass-wrapped tube. Unlike the M72 LAAW, the AT4 launcher does not need to be extended before firing. When the warhead makes impact with the target, the nosecone crushes and the impact sensor activates the internal fuse.

Upon ignition, the piezoelectric fuse element triggers the detonator, initiating the main charge. This results in penetration where the main charge fires and sends the warhead body into a directional gas jet, which is capable of penetrating over seventeen inches of armor plate. The after effects are "spalling"; the projecting of fragments and incendiary effects generate blinding light and obliterate the interior of the target.

## *Load Bearing Equipment (LBE)*

It began with stuffing extra magazines into BDU pockets, then pouches and vests. Today, dependant on the mission, the most common way of carrying gear is in an assault vest or chest harness. Attached to the pistol belts, assault vests provide an easy access to ammunition and other items during the fast-paced CQB mission. On the front of the vest, pouches may hold magazines for M4A1 5.56mm, MP5 9mm, or 7.62mm depending on the weapon of choice for the operator. Small pockets and pouches are readily available to accommodate pistol magazines, shotgun shells, first aid field dressing, flex cuffs, strobes, chem-lights, pressure dressings, or grenades (e.g., smoke, stun, CS gas, and fragmentation). Some vest designs are of a modular nature, where the vest is made up of

attachment points via Velcro, Alice clips, or other fasteners. These systems allow for the modification of the user's vest with assorted holsters, magazine pouches, radio pockets, etc. Internal pockets allow the operators to stow maps or other gear. Additionally, these vests may have various-sized back pouches to accommodate such items as gas masks, helmets, demolition equipment, and other mission-essential items.

Recently, as seen in Operations Enduring Freedom and Iraqi Freedom, many of the SOF operators are gravitating to the chest harness. A number of manufacturers feature such COTS harnesses (e.g., Blackhawk Industries, High Speed Gear, Eagle, and Tactical Tailor). While assault vests and LBE continues to be used by the teams, a number of the special tactics team members are migrating to the chest harness. The larger pouches will accommodate two to three M4, 30-round magazines depending on the manufacturer. The other pouches will accommodate such items as hydration systems, radios, MRE, compass, laser pointer, or other mission-essential equipment.

The team's SOP will determine the layout of the mission-essential gear. All team members are sure of each member's equipment capabilities, equipment is exchangeable, training continuity is achievable, and less variation in team equipment means fewer problems to consider. Another requisite item worn on the vests is the U.S. flag, most often an IR version.

A pair of M136 AT4 light anti-tank weapons can be seen in the back seat of this NSTV. The AT4 provides precision delivery of an 84mm high-explosive, anti-armor warhead, with negligible recoil. The AT4 is a man-portable, self-contained, anti-armor weapon consisting of a free-flight, fin-stabilized, rocket-type cartridge packed in an expendable, one-piece, fiberglass-wrapped tube. The warhead is capable of penetrating more than seventeen inches of armor plate, the aftereffects are "spalling" the projecting of fragments and incendiary effects generating blinding light and obliterating the interior of the target. Note the M60 7.62mm machinegun equipped with ACOG and AN/PEQ-2. *U.S. Air Force*

## *GPS*

Whether its AFSOC Pave Low pilots navigating to exact locations through the mountains, or STS teams conducting reconnaissance and surveillance over sand dunes and wadis in the dead of night, teams rely on global positioning systems to perform these tasks.

The precise name for the Rockwell "Plugger," or PSN-11, is PLGR96 (precise lightweight GPS receiver). The PLGR96 is the most advanced version of the U.S. Department of Defense handheld GPS units. It addresses the increasingly demanding requirements of the U.S. Special Operations forces.

Secure (Y-code) differential GPS (SDGPS) allows the user to accept differential correction without zeroing the unit. Other features of the Plugger include wide-area GPD enhancement (WAGE) for autonomous positioning accuracy to four meters CEP, jammer direction finding, targeting interface with laser range-finder, remote display terminal capability, and advanced user interface features.

Weighing in at a mere 2.7 pounds (with batteries installed), the GPS unit is easily stowed in the cavernous rucksack that the STS troops carry. In addition to handheld operation, the PLGR96 unit can be installed into various vehicles and airborne platforms.

While all special tactics teams are schooled in land navigation using the standard issue Lensetic compass, it is equally important for the teams to be able to have pinpoint accuracy when conducting a DA mission through the desert, or across the frozen tundra, in enemy territory, in the middle of the night. They will need to know the position of a terrorist's hideout, a radar station, or perhaps a WMD cache when reporting into headquarters. For such instances they will utilize a device known as a global positioning system.

The GPS is a collection of satellites that orbit the earth twice a day. During this orbiting, they transmit the precise

Working together with the Special Forces, battlefield airmen hitch a ride with the 3rd SFG. The ground mobility vehicle (GMV) had its origins in Desert Storm. During the Gulf War, the Special Forces–modified HUMMVs were used for extended desert missions and dubbed as the DUMMVs, pronounced—"Dum-Vees." The modifications included a heavier suspension, more powerful engine, an open bed, and back for storage of water and fuel and other mission essential items. This GMV is armed with an M2 .50-caliber machinegun and an M240B 7.62mm machine gun. *U.S. Air Force*

A member of the STT races down the tarmac still carrying his rucksack and armed with an M4. He will search the runway for foreign object damage (FOD). Anything that may hamper the follow-on forces from landing will be dealt with expeditiously. If necessary, CCTs are trained to remove such obstacles with explosives.

A special tactics squadron team member takes a break as he poses with one of the team's non-standard tactical vehicles (NSTV). These Toyota pickup trucks are everywhere in Afghanistan allowing the SOF teams to infiltrate with more ease in their hunt for Taliban and al-Qaeda forces. He is armed with an M4A1 assault rifle, though he has traded the standard BDUs for more covert attire. *U.S. Air Force*

This Polaris all-terrain vehicle (ATV) has a variety of uses for the STT. It is air droppable expediting an airfield survey and may be set up with an assortment of radio equipment to facilitate the ATC mission of the CCTs. It can be set up to shuttle supplies or wounded from point-to-point for the PJs. Using the quad, the STT can quickly maneuver from one area of the airhead to another as the mission unfolds. These STS team members have stopped to take some wind measurements. *U.S. Air Force*

The ATVs are in use by STT conducting search and destroy missions as they hunt down Taliban and al-Qaeda forces. This Polaris ATV is loaded down with mission-essential gear as special tactics teams carry out their missions in the cold wasteland of Afghanistan in support of Operation Enduring Freedom. This combat controller is armed with an M4A1 carbine and is wearing AN/AVS-6V3 NVGs to maneuver through the moonless night. *U.S. Air Force*

Having parachuted into an airfield prior to the follow-on forces, this combat controller prepares to activate the TACAN mounted on the rear of a quad. The TACAN is an omni-directional navigation beacon, which will be used by the incoming aircraft.

Whether speeding down the tarmac of a captured airfield or busting through the bush, the rescue all terrain transport (RATT) is well designed to meet the demanding needs of the AFSOC STS troopers' RATT. Designed to AFSOC specifications, this vehicle is used by special tactics squadrons. It can be fitted with litters to accommodate the pararescue men doing combat triage.

time, latitude, longitude, and altitude information. Using a GPS receiver, Special Operations forces can ascertain their exact location anywhere on the earth.

## *AN/PEQ-1A SOFLAM*

When it absolutely, positively has to be destroyed, you put an SOF team on the ground and a fast mover with a smart bomb in the air and the result is one smoking bomb crater. The Special Operations forces laser acquisition marker (SOFLAM) is lighter and smaller than the current laser marker in service with the U.S. military. It provides the STT with the capability to locate and designate critical enemy targets for destruction using laser-guided ordnance. It can be used in daylight or with the attached night-vision optics, it can be employed at night.

Northrop Grumman's ground laser target designator (GLTD II), a.k.a. the SOFLAM, is a compact, lightweight, portable laser target designator and rangefinder. The SOFLAM is capable of exporting range data via an RS422

An STS combat controller places an IR signaling light in preparation for a helicopter insertion. Special tactics squadrons are a combination of combat controllers, pararescuemen, and occasionally Special Operations weather teams. These highly trained battlefield airmen are experts in ATC, CAS, emergency trauma medicine, and forecasting.

link and importing azimuth and elevation. It was designed to enable Special Operations forces to direct laser-guided smart weapons, such as Paveway bombs, Hellfire missiles, and Copperhead munitions. The AN/PEQ-1A can be implemented as part of a sophisticated, digitized fire-control system with thermal or image-intensified sights.

The SOFLAM uses the PRF or pulse repetition frequency that can be set to NATO STANAG Band I or II or is programmable. (Note: STANAG represents standards and agreements set forth by NATO for the process, procedures, terms, and conditions under which Mutual Government Quality Assurance of defense products are to be performed by the APPROPRIATE NATIONAL AUTHORITY of one NATO member nation, at the request of another NATO member nation or NATO Organization.) PRF is the number of pulses per second transmitted by a laser.

Land navigation is an essential skill for all Special Operations operators. Knowing the location of the insertion LZ, the coordinates for the smart bomb is not insignificant, where is the extraction point. Special tactics teams get training in land navigation to facilitate their mission success. The Rockwell precision lightweight GPS receiver, or PLGR96 referred to as the "Plugger," will continuously track up to five satellites. The unit is sealed for operations in all environments, and computes accurately position coordinates, elevation, speed, and time data from transmitted signals from orbiting GPS satellites.

### *Radios*

One of the most awesome weapons in the inventory of the special tactics squadron is without a doubt their radio. A veteran combat controller relates, "When the lead starts flying, the shooters think in terms of 'head to ground,' the STS team thinks in terms of 'head and above.'" During OEF, for every one kill a combat controller made with his M4A1 carbine, he made 168 with CAS called in on his radio.

Communication is paramount in the arsenal of the STS team. You see it when they take off their floppy hats and the head gear of the interteam radio is visible. It is there when the team unfolds the umbrella-like satellite antennae and connects it to the compact PRC-117F. Whether using UHF, VHF, line of sight, or SATCOM, the STS teams maintain the vital link between their unit and the air assets. With this, they can call in the full weight of an AC-130U gunship circling overhead or an MH-53E Pave Low, orbiting just beyond the ridge line. As Senior Master Sgt. Philip Rhodes, AFSOC PAO reports, "...(An) STS team on the ground and a gunship in the air is a lethal combination."

### AN/PRC-117F

Communications is the lifeline of any special tactics team on a mission. For long-range communications, the AN/PRC-117F covers the entire 30 to 512 MHz frequency range while offering embedded COMSEC, and Havequick I/II ECCM capabilities. This advanced software reprogrammable digital radio supports continuous operation across the 90 to 420 MHz band providing 20 W FM and 10 W AM transmit power with Havequick I/II capability (10 W FM in other frequency ranges).

It can be used in conjunction with the KY-57/TSEC speech security equipment for secure voice communications. The radio supports both DS-101 and DS-102 fill interfaces and all common fill devices for Havequick Word-of-Day (WOD) and encryption key information. This device supports the Department of Defense requirement for a lightweight, secure, network-capable, multi-band,

When it absolutely, positively has to be destroyed, you put a SOF team on the ground and a fast mover with a smart bomb in the air. The PEQ-1A SOFLAM, weighing twelve pounds, is a man-portable laser designator used to mark targets for laser-guided ordnance and a laser range finder for determining the distance to a target.

Pictured is the business end of an AN/PEQ-1A laser designator. The SOFLAM uses the pulse repetition frequency (PRF) that can be set to NATO STANAG Band I or II or is programmable. The PRF is the number of pulses per second transmitted by a laser. Before the pilot releases his ordinance, the aircraft's computer indicates to the bomb's control system a specific pattern, the PRF. Once the smart bomb is released, it will home in on that specific pulse pattern; guiding in on the SOFLAM signal, the ordnance will find its way directly to the target. This is often referred to as "painting the target."

multi-mission, anti-jam, voice/imagery/data communication capability in a single package.

## PRC/148 MBITR

Thales Communication multiband inter/intrateam radio (MBITR) is a powerful tactical handheld radio designed for the U.S. Special Operations Command. The MBITR more than met the tough SOCOM requirements and provides a secure voice and digital-data radio with exceptional versatility, ruggedness, and reliability.

The immersable unit weighs less than two pounds and includes a keypad, graphics display, and built-in speaker-microphone. Typical of the advanced designs of Thales radios, MBITR utilizes digital-signal processing and flash memory to support functions traditionally performed by discrete hardware in other manufacturers' equipment. The power output is up to five watts over the 30- to 512-MHz frequency band. The MBITR has embedded Type 1 COMSEC for both voice and data traffic.

## *Battlefield Air Operations Kit*

Depending on the mission being conducted by the special tactics team, these airmen will carry a wide variety of equipment, which may include: UHF/VHF radio, intrateam radio, headsets, GPS units, SOFLAM, Laser Ranger finder, Laser pointers, scopes, thermal video, beacons, tactical UAV, Panasonic "Toughbook" computer, extra batteries, food, water, ammunition along with primary and secondary weapons. When you add it up, the total weight of the equipment will often exceed that of the operator.

This fact was not lost on AFSOC and they went to work evaluating equipment, military as well as COTS, which was lighter, smaller, and was multi-functional with an ease of deployment. Today, what used to weigh in at more than one hundred pounds now weighs approximately seventy-five pounds. The improved equipment is lighter weight and more

compact. Known as the battlefield air operations (BAO) kit, it allows the combat controller to insert more efficiently and effectively behind enemy lines.

The BAO kit contains laser designators, scopes thermal imagers, and range finders. All this data along with the GPS coordinates are fed into the combat controller's computer. From there specially designed software allows the controller to transmit targeting data to the command and control element who will make the decision to destroy the target or pass the information on to other aircraft.

A feature of the BAO kit allows the combat controller to send intelligence directly from machine-to-machine, called M2M instead of human to human, to avoid targeting errors. The Net-centric methodology allows the combat controller to use what is known as cursor-on-target. The concept is to place the data from system to system while the human element controls the military decision.

The BAO kit is constantly evolving as new technology and equipment becomes available. Just as the combination of the cell phone, camera, and Internet in a handheld PDA, which is commonplace in any office, AFSOC endeavors to combine various equipment into compact devices to serve the special tactics team members in the field. While technology is a wonderful thing, it must be remembered that to be of any tactical value it must be placed in the hand of the battlefield airman.

**Above:** Thales' multiband inter/intrateam radio (MBITR) is a powerful tactical handheld radio designed for the U.S. Special Operations Command. Designated the AN/PRC148, it provides a secure voice and digital-data radio with exceptional versatility, ruggedness, and reliability. The immersible unit weighs less than two pounds and includes a keypad, graphics display, and built-in speaker-microphone. The MBITR has embedded Type 1 COMSEC for both voice and data traffic. *U.S. Air Force*

**Left:** "Call for Fire." An STS team leader calls in coordinates to the AC-130U Spooky gunship on station using an AN/PRC-117, while his teammate provides cover with a GUU-5/P. A special tactics team on the ground and a gunship overhead is a lethal combination.

Chapter 9

# FUTURE OF AFSOC

The twenty-first century AFSOC warrior will be able to communicate better and evaluate intelligence faster than any of his predecessors. The battlefield airman of AFSOC will be equipped with the latest technology. As part of the SOF Warfighter Information Process Enhancements (SWIPE) Initiative during the Joint Expeditionary Force Experiment (JEFX) the STT will employ new information technology, Panasonic's Toughbook computer. Using this computer, the team can encompass a target from various positions. The wireless computers serve as a network where each team member can send information to the team leader, or "hub." The gathered intelligence, digital photos, or video and reports can then be shared with other teammates or sent via burst transmission over SATCOM to combatant commanders for review.

Unmanned aerial vehicles (UAVs) will continue to play a vital role as AFSOC prosecutes the Global War on Terrorism. The large Predator or the small hand-launched BatCam systems will help the aircrews above and the battlefield airmen on the ground to continue to excel at what they do best: raining down the might and power of the U.S. Air Force on the enemy.

As AFSOC continues to grow and evolve, the STS teams will see the infusion of high-tech equipment into their kit. The battlefield airmen of tomorrow will deploy with lighter, compact, and more capable equipment then ever before. This new technology with allow them to leverage an incredible amount of firepower on the enemy.

Today, combat controllers use an air traffic control simulator showing them views of numerous airports and airfields, viewed in a variety of weather conditions in night or daylight environments. When he hits the ground, he'll already be familiar with the lay of the land. Further research is being

Special tactics teams have been at the tip of the spear in the GWOT. The battlefield airman will provide operational depth to the theater combatant commander. Combat controllers as seen here are laden down with communications gear, GPS, computers, batteries, laser targeting equipment, sensors, food, batteries, and personal weapons. They are prepared to deal death upon the enemy or guide in aircraft carrying follow-on forces using their CAS or ATC skills, respectively, as required. The most lethal SOF operator on the ground is a STS team with a radio and a bomber, fast mover, or gunship overhead. *U.S. Air Force*

**Left:** An AFSOC CV-22 Osprey is silhouetted against the setting sun as it heads out for the evening's mission. The CV-22 will provide high speed time on target of an airplane, while operating as an insertion platform like a helicopter. The Osprey will conduct these missions with fewer incidents of aerial refueling thereby allowing covert SOF operations in one period of darkness. This aircraft will serve the Air Commandos providing agile clandestine mobility in placing Special Operations forces on target. *U.S. Air Force*.

**Above:** "When in Rome." A special tactics squadron combat controller wears the local garb as he operates with SOF units in Afghanistan during Operation Enduring Freedom. Dressed in such manner allows the special operations warriors to blend into their surroundings. As long as these men are operating 'down range', no enemy is safe. They are the point of the eagle's talons as they hunt down high-value targets to bring them to justice, or bring justice to them. *U.S. Air Force*

AFSOC airman with computer JEFX: The twenty-first-century AFSOC warrior will be able to communicate better and evaluate intelligence faster than any of his predecessors. Here, an airman uses a Panasonic "Toughbook" computer, which is part of the SOF Warfighter Information Process Enhancements (SWIPE) Initiative during the Joint Expeditionary Force Experiment (JEFX). This airman is evaluating information processing enhancements, which enable him to gather intelligence, digital photos, or video and write up reports, which can then be shared with other teammates or sent via burst transmission over SATCOM to combatant commanders for further review. *U.S. Air Force*

Scout/Swimmer of a STT breaks the surface of the water and prepares to "recon" the beachhead. Once all is clear, he will signal the rest of the team to come ashore and they will begin their stealthy movement to their objective. With all the high-tech weaponry and equipment, it is still the warrior on the ground that brings all this gear to life.

done with special helmets that are linked to computers and satellites. These units will provide the wearer with tactical information via a heads-up display or HUD unit in the visor. Combat controllers will be able to see navigational data on the visor, while the PJ may bring up a procedure from a medical library contained in a computer in their rucksack. Holographic devices, improved night-vision goggles (NVGs), and thermal imagers may be found in the rucksacks of the STT in the not-so-distant future.

Today, the world is at war against fanatical Islam fascism. Just as they did more than sixty years ago, the Air Commandos of today stand poised to combat the threat to liberty and freedom. Faced with some of the most austere conditions in the world, against an enemy that has no soul, AFSOC personnel are ready to carry out their missions.

The crew of an MC-130H will penetrate enemy air defenses to deliver an SOF team. A Combat Shadow will refuel a CV-22 somewhere over, oops—sorry, that's classified. Days before an assault, an STT will perform a regional survey of an HLZ; while a Pave Low will fly in under enemy radar, skimming above the terrain below, to perform a personnel recovery mission. An AC-130 gunship will be on station to provide CAS, and above them all will be a Predator providing intelligence and backup firepower if needed.

As America continues to wage the Global War on Terror, the men and women of AFSOC will remain at the tip of the

As AFSOC enters the next millennium, special tactics squadrons will continue to be the tip of the spear in U.S. Special Operations forces. They will more often than not be onsite before any other forces. They will often serve as the eyes and ears of USSOCOM, and if necessary they will bring in the muscle of the air assets of AFSOC, living up to their motto, "That others may live."

spear. When the President of the United States asks for "boots on the ground and eyes on the target," the first set of eyes will very likely be those of the Air Force Special Operations Command, special tactics teams. Whether it may be a combat controller, pararescueman, or Special Operations weathermen, these teams are masters of the art of war.

These are the Quiet Professionals of the U.S. Air Force Special Operations Command; the Air Commandos of the twenty-first century who carry on the tradition—ANYTIME, ANYPLACE.

# Glossary

**AT:** Antiterrorism. Defensive measures used to reduce the vulnerability of individuals and property to terrorism.

**Battlefield airmen:** Air Force Special Operations Command special tactics squadron team members, combat controllers, pararescuemen, and Special Operations weather teams.

**Battle rattle:** Combat gear from body armor to load-bearing vest and all related equipment carried by the STT members.

**C4I:** Command, control, communications, computers, and intelligence.

**CinC:** Commander in chief. This refers exclusively to the President of the United States.

**Civil affairs:** The activities of a commander that establish, maintain, influence, or exploit relations between military forces and civil authorities, both governmental and nongovernmental, and the civilian population in a friendly, neutral, or hostile area of operations to facilitate military operations and consolidate operational objectives. Civil affairs may include performance by military forces of activities and functions normally the responsibility of the local government. These activities may occur prior to, during, or subsequent to military action. They may also occur, if directed, in the absence of other military operations.

**Clandestine operation:** Activities sponsored or conducted by governmental departments or agencies in such a way as to ensure secrecy or concealment. (It differs from covert operations in that emphasis is placed on concealment of the operation rather than on concealment of the identity of the sponsor.) In Special Operations, an activity may be both covert and clandestine and may focus equally on operational considerations and intelligence-related activities.

**Close air support (CAS):** Air action against hostile targets that are in close proximity to friendly forces and require detailed integration of each air mission with the fire and movement of those forces.

**Collateral special operations activities:** Collateral activities in which Special Operations forces, by virtue of their inherent capabilities, selectively may be tasked to participate. These include security assistance, humanitarian assistance, antiterrorism and other security activities, counter-drug operations, personnel recovery, and special activities.

**Counter-proliferation:** Activities taken to counter the spread of dangerous military capabilities, and allied technologies or know-how, especially weapons of mass destruction and ballistic missile delivery systems.

**Counter-terrorism:** Offensive measures taken to prevent, deter, and respond to terrorism.

**Covert operations:** Operations planned and executed to conceal the identity of or permit plausible denial by the sponsor.

**Direct action mission:** In special operations, a specified act involving operations of an overt, covert, clandestine, or low-visibility nature conducted primarily by a sponsoring power's Special Operations forces in hostile or denied areas.

**Ducks:** Types of Zodiac deployments.

**Double duck:** Twin Zodiacs.

**Hard:** Zodiac with hard metal bottom.

**K duck:** Kangaroo.

**Soft duck:** Zodiac raft.

**T duck:** Tethered.

**Exfiltration:** The removal of personnel or units from areas under enemy control.

**First-line belt:** Specially designed webbing with a shock cord inside, used when traveling on aircraft. One end has a standard carabineer and the other end has a quick-release carabineer.

**Foreign internal defense:** Participation by civilian and military agencies of a government in any action programs taken by another government to free and protect its society from subversion, lawlessness, and insurgency.

**Guerrilla warfare:** Military and paramilitary operations conducted in enemy-held or hostile territory by irregular, predominantly indigenous forces.

**Host nation:** A nation that receives the forces or supplies of allied nations or NATO organizations to be located on, operated in, or transited through its territory.

**Infiltration:** The movement through or into an area or territory occupied by either friendly or enemy troops or organizations. The movement is made, either by small groups or by individuals, at extended or irregular intervals. When used in connection with the enemy, it implies that contact is avoided.

**Insurgency:** An organized movement aimed at the overthrow of a constituted government through the use of subversion and armed conflict.

**Internal defense:** The full range of measures taken by a government to free and protect its society from subversion, lawlessness, and insurgency.

**Interoperability:** The ability of systems, units, or forces to provide services to and to accept services from other systems, units, or forces, or use the services so exchanged to enable them to operate effectively together.

**Low-intensity conflict:** Political-military confrontation between contending states or groups below conventional war and above routine, peaceful competition among states. It frequently involves protracted struggles of competing principles and ideologies. Low-intensity conflict ranges from subversion to the use of armed force. It is waged by a combination of means employing political, economic, informational, and military instruments. Low-intensity conflicts are often localized, generally in the Third World, but contain regional and global security implications.

**METT-T:** Mission, Enemy, Troops, Terrain, and Time. Perimeters that affect the mission profile of the AFSOC task, including STS Personnel Recovery or AC-130 gunship CAS. These five criteria must be addressed in the mission planning.

**Military civic action:** The use of indigenous military forces on projects useful to the local population at all levels in such fields as education, training, public works, agriculture, transportation, communications, health, sanitation, and others contributing to economic and social development.

**Mission:** A statement of our reason for being and what we wish to accomplish as an organization.

**NCA:** National Command Authorities. The president and the secretary of defense together or their duly deputized alternates or successors. The term signifies constitutional authority to direct the Armed Forces in their execution of military action.

**Objectives:** Specific actions to be achieved in a specified time period. Accomplishment will indicate progress toward achieving the goals.

**Ranger assist cord:** A 550 cord (parachute line) used to attach anything and everything to an operator.

**RAMZ:** Rigging alternate method zodiac (pronounced "rams"). Procedure for air-dropping a Zodiac raft.

**REDS:** Rapid extrication deployment system, similar to the "jaws of life."

**Special reconnaissance:** Reconnaissance and surveillance actions conducted by Special Operations forces to obtain or verify, by visual observation or other collection methods, information concerning the capabilities, intentions, and activities of an actual or potential enemy or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area. It includes target acquisition, area assessment, and post-strike reconnaissance.

**Strategy:** Methods, approaches, or specific moves taken to implement and attain an objective.

**Unconventional warfare:** A broad spectrum of military and paramilitary operations conducted in enemy-held, enemy-controlled, or politically sensitive territory. Unconventional warfare includes, but is not limited to, the interrelated fields of guerrilla warfare, evasion and escape, subversion, sabotage, and other operations of a low-visibility, covert, or clandestine nature. These interrelated aspects of unconventional warfare may be prosecuted singularly or collectively by predominantly indigenous personnel, usually supported and directed in varying degrees by (an) external source(s) during all conditions of war or peace.

# Acronyms and Abbreviations

AFSOC—Air Force Special Operations Command
AFSOF—Air Force Special Operations facility
ARSOC—U.S. Army Special Operations Command
CAP—Combat air patrol
CAS—Close air support
CCT—Combat control team
CIA—Central Intelligence Agency
CQB—Close quarters battle
CQBR—Close quarters battle receiver
CQC—Close quarters combat
CRO—Combat Rescue Officer
CRRC—Combat rubber raiding craft
CSAR—Combat search and rescue
CT—Counterterrorism
DA—Direct action
DOD—Department of Defense
DZ—Drop zone
E&E—Evasion and escape
EW—Electronic warfare
FAC—Forward air control
FID—Foreign internal defense
FLIR—Forward looking infrared
FOB—Forward operation base
FRIS—Fast rope insertion system
GPS—Global positioning system
GWOT—Global War On Terrorism
HAH—High altitude high opening
HALO—High altitude low opening
HE—High explosive
HEDP—High explosive dual purpose
HEI—High explosive incendiary
HUMINT—Human intelligence
IFAM—Initial familiarization
IIN—Integrated inertial navigation
INTREP—Intelligence report
JCS—Joint Chiefs of Staff
JTF—Joint Task Force
LBE—Load bearing equipment
LZ—Landing zone
MRE—Meal ready to eat
MTT—Mobile training team
NOE—Nape of the earth
NOD—Night optical device
NVG—Night-vision goggles
OEF—Operation Enduring Freedom
OGA—Other government agency—i.e., CIA
OIF—Operation Iraqi Freedom
PJ—Pararescue jumper
PR—Personnel recovery
PSYWAR—Psychological warfare
RAMZ—Rigid alternate method Zodiac
REDS—Rapid extrication deployment system
RST—Reconnaissance and surveillance team
SAR—Search and rescue
SAS—Special Air Service
SCAR—Special Operations forces combat assault rifle
SEAL—Sea Air Land (U.S. Navy Special Forces)
SF—Special Forces (U.S. Army)
SOCOM—Special Operations Command
SOF—Special Operations forces
SOFLAM—Special Operations forces laser acquisition marker
SOWT—Special Operations weather team
SPIES—Special procedure insertion extraction system
SR—Special reconnaissance
SST—SAR security team
STO—Special tactics officer
STS—Special tactics squadron
STT—Special tactics teams
USASOC—U.S. Army Special Operations Command
UW—Unconventional warfare
WMD—Weapons of mass destruction

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# DELTA Epilogue

After many years of studying the art of insurgency and its subset, terrorism, it's fair to say that in the future, the world may have an opportunity to observe counterterrorist operations executed by DELTA, but most of their missions will be executed with surgical precision, and the public will never hear of their accomplishments.

In a box of mementos from campaigns, battles, and counterterrorist operations, a battered and scratched lighter bears the following engraved sentiment: "Live by chance, Love by choice, Kill by profession."

Willing to do whatever it takes to achieve their goals, 1st Special Forces Operational Detachment–DELTA is ready.

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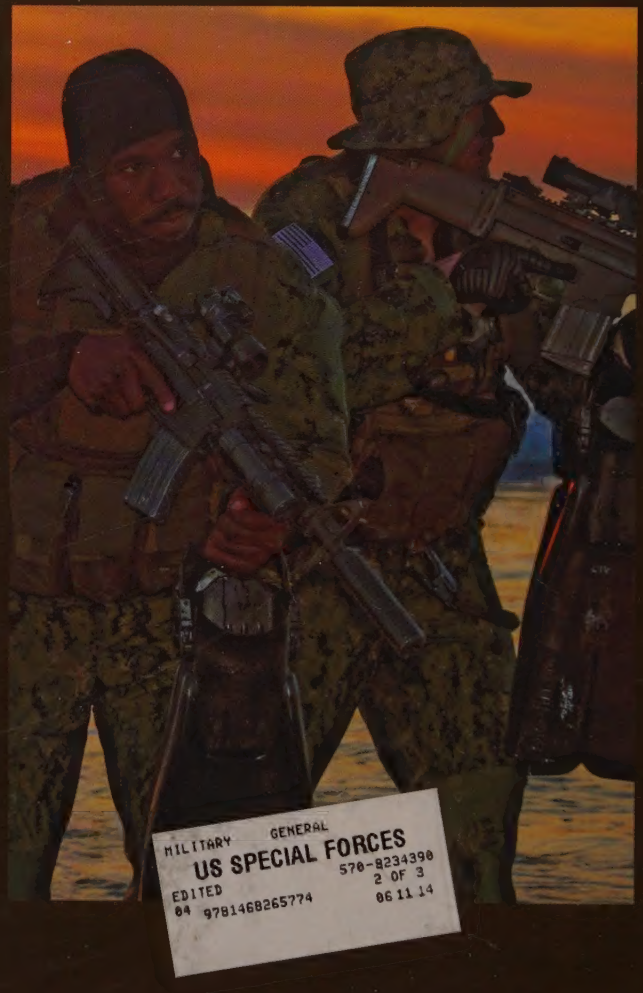


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